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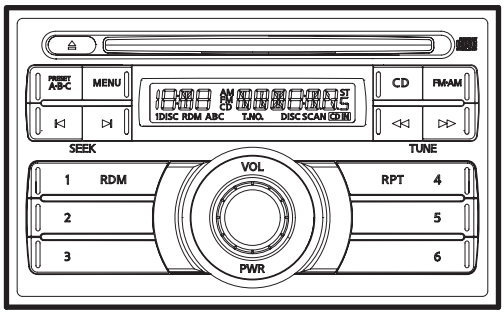
Service Manual



NISSAN Automobile Genuine
CD AM/FM Radio with FM Diversity

Model PP-2898H-C,F

(Genuine No. 28185 ZS30A)
(VISTEON No. ZS30A-28185-R0NAA)

SPECIFICATIONS

Radio section

Tuning system:	PLL frequency synthesizer system
Receive range:	FM: 87.75MHz to 107.9MHz
	AM: 530kHz to 1,710kHz
Intermediate frequency:	
	FM: 10.7MHz
	AM: 1st 10.7Mz,2nd 450kHz
Quieting sensitivity:	FM: Less than 10dBu(at 30dB S/N)
	AM: Less than 32dBu(at 20dB S/N)
Separation:	FM: 22dB +5/-7dBu(1kHz)
S/N ratio:	FM: More than 50dB
	AM: More than 45dB
Auto tuning stop sensitivity:	
	FM: 25dBu +6/-6dBu
	AM: 32dBu +6/-6dBu

CD player section

Disc:	12cm, 8cm Disc
Separation:	More than 50dB
	(1kHz,20kHz L.P.F.)
S/N ratio:	More than 74dB
	(1kHz, 20kHz L.P.F., JIS-A)
Distortion:	Less than 0.4%
	(1kHz, 20kHz L.P.F., JIS-A)

General

Load impedance:	2 ohm/4ch
Power output:	50W x 4
Power supply voltage:	DC13.2V (10.8V to 15.6V)
	Negative ground
Back-up consumption:	Less than 1.0mA
Dimensions(mm):	182(W) x 104(H) x 164(D)
Weight:	Approx. 1.5kg

NOTES

* We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.
* Specifications and design are subject to change without notice for further improvement.

COMPONENT

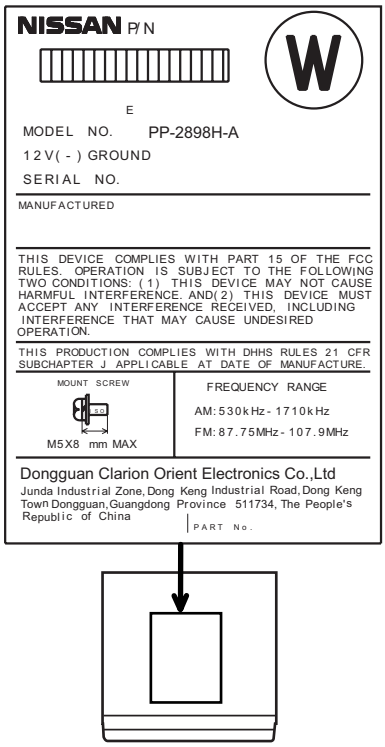
PP-2898H-C,H-F

1.	Main unit	----------	1

CAUTIONS

Use of controls, adjustment, or performance of procedures other than those specified herein, may result in hazardous radiation exposure.

The compact disc player should not be adjusted or repaired by anyone except properly qualified service personnel.


NISSAN P/N
W
E
MODEL NO. PP-2898H-A
12V(-) GROUND
SERIAL NO.
MANUFACTURED
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE. AND(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.
THIS PRODUCTION COMPLIES WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE.
MOUNT SCREW
M5X8 mm MAX
FREQUENCY RANGE
AM: 530kHz - 1710kHz
FM: 87.75MHz - 107.9MHz
Dongguan Clarion Orient Electronics Co.,Ltd
Junda Industrial Zone, Dong Keng Industrial Road, Dong Keng Town Dongguan, Guangdong Province 511734, The People's Republic of China
PART No.

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.
   The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.
   The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.
2. Place the parts and wiring back in their original positions after replacement or re-wiring.
   For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.
   If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.
3. Check for safety after repair.
   Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots.
   If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
4. Caution in removal and making wiring connection to the parts for the automobile.
   Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
5. Cautions in soldering
   Please do not spread liquid flux in soldering.
   Please do not wash the soldering point after soldering.
6. Cautions in soldering for chip capacitors
   Please solder the chip capacitors after pre-heating for replacement because they are very weak to heat.
   Please do not heat the chip capacitors with a soldering iron directly.
7. Cautions in handling for chip parts.
   Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc).
   Please make an operation test after replacement.
8. Cautions in handling flexible PWB
   Before working with a soldering iron, make sure that the iron tip temperature is around 270℃. Take care not to apply the iron tip repeatedly(more than three times)to the same patterns. Also take care not to apply the tip with force.
9. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.
10. Cautions in checking that the optical pickup lights up.
    The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.
11. Cautions in handling the optical pickup
    The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

11-1. Laser diode

The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

11-2. Actuator

The actuator has a powerful magnetic circuit. If a magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

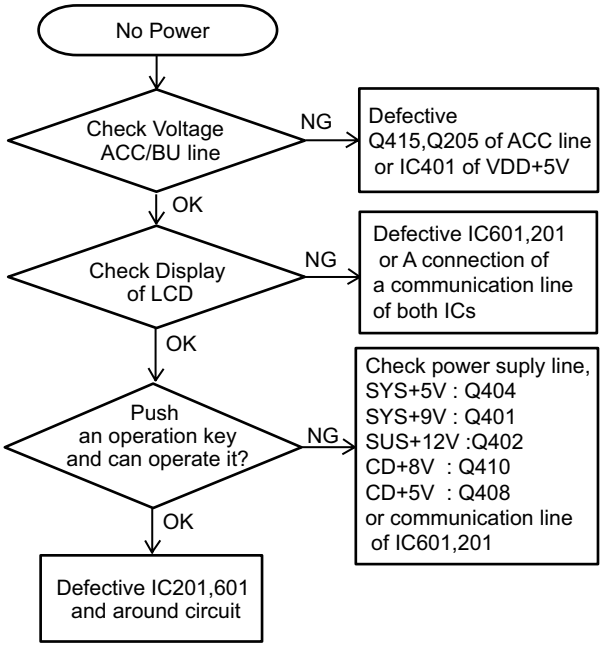
11-3. Cleaning the lens

Dust on the optical lens affects performance.

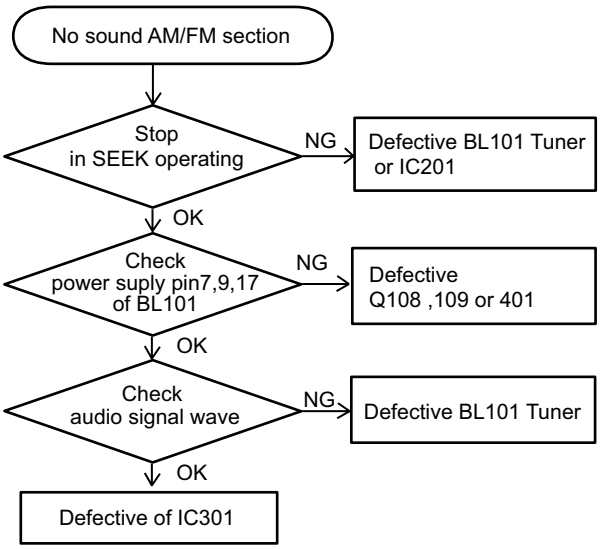
To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

TROUBLESHOOTING

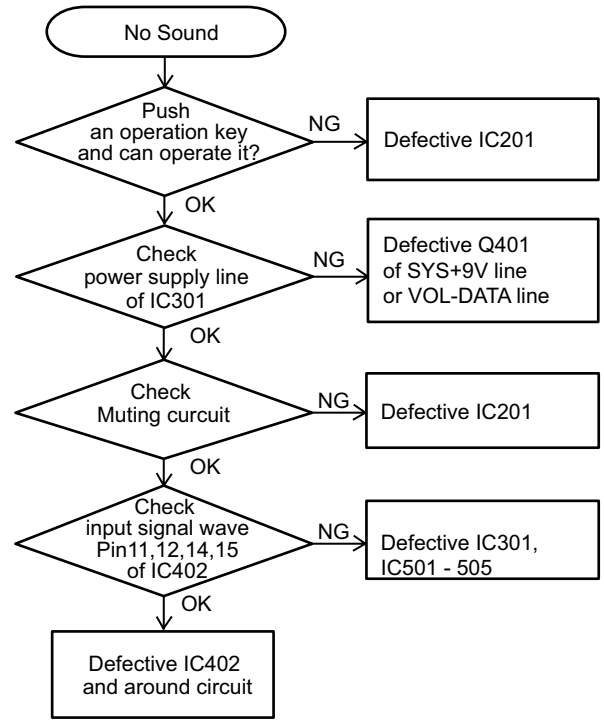
No Power


No Power
Check Voltage ACC/BU line
NG
Defective Q415,Q205 of ACC line or IC401 of VDD+5V
OK
Check Display of LCD
NG
Defective IC601,201 or A connection of a communication line of both ICs
OK
Push an operation key and can operate it?
NG
Check power suply line, SYS+5V : Q404 SYS+9V : Q401 SUS+12V :Q402 CD+8V : Q410 CD+5V : Q408 or communication line of IC601,201
OK
Defective IC201,601 and around circuit

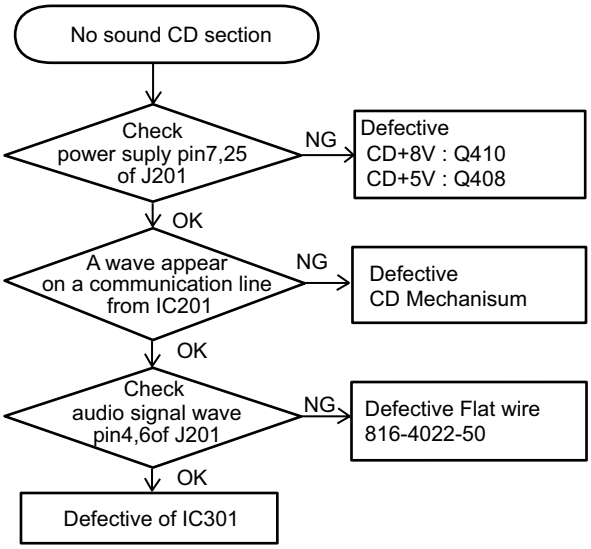
No sound AM/FM section

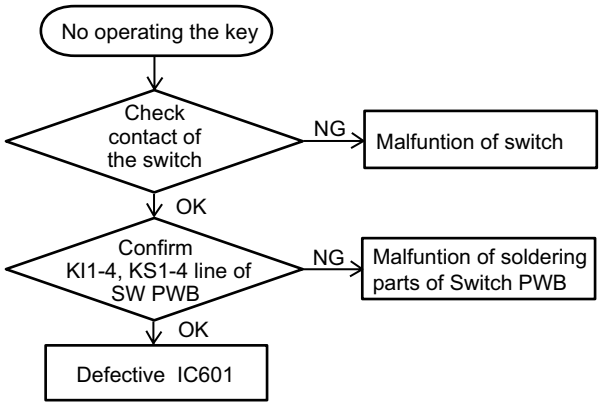


No Sound



No sound AM/FM section



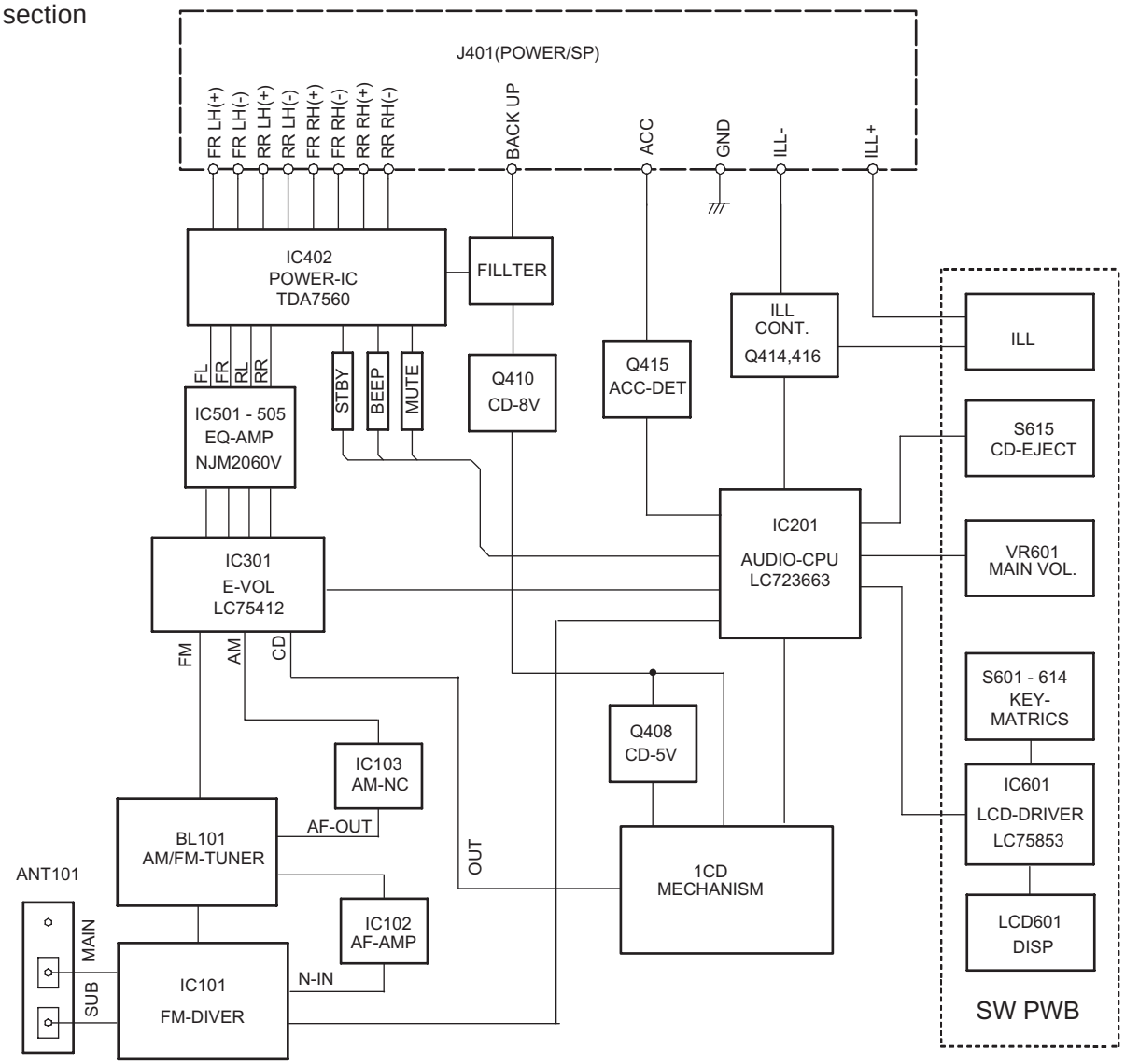


ADJUSTMENT

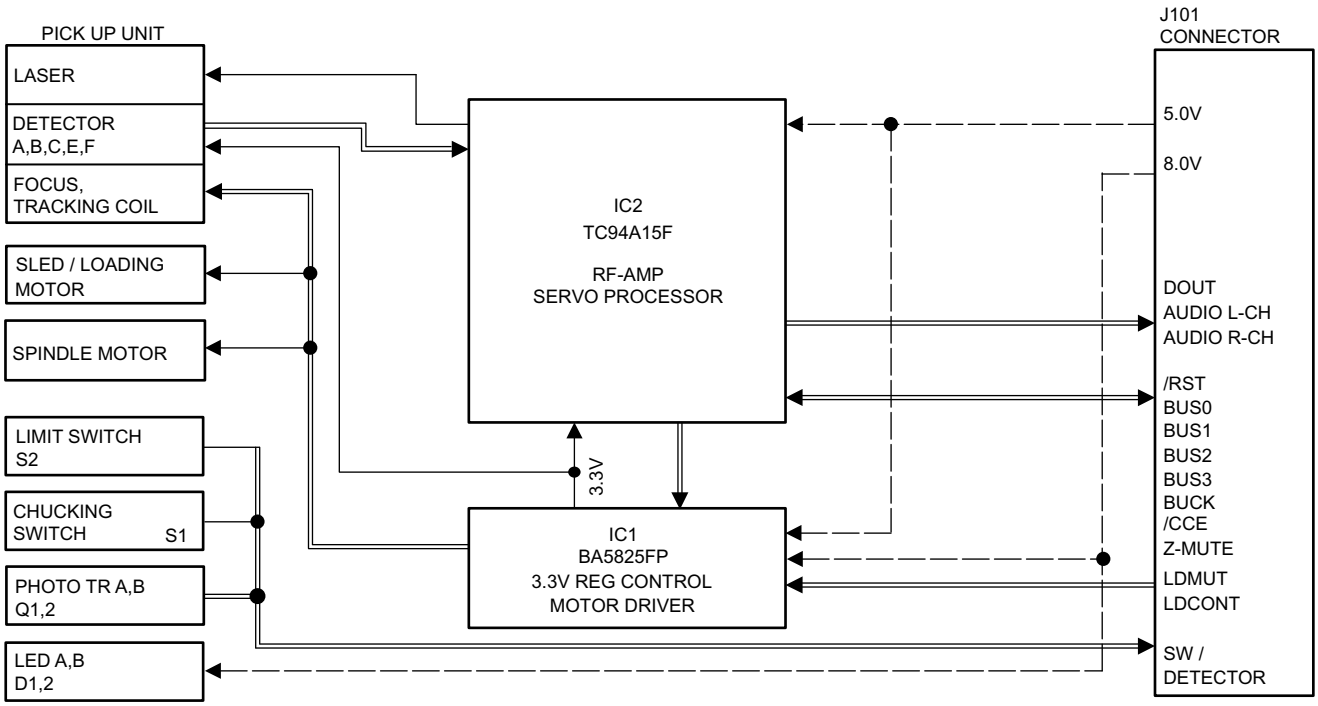
Item	Procedure	Measuring instrument
Clock accuracy	1. Connect the Choronometer to TP218. 2. Connect the B/U and ACC line, and Turn on the ACC switch. 3. LCD display change Ver.---, While holding the buttons of MENU,M1,M5 and POWER. 4. Adjust TC201 so that an output of TP218 becomes 0.0 +0.2/-0.0Sec./day.	Choronometer
FM noise convergence	1. Input the 98.1MHz/55dBu(1kHz 22.5kHz Div.) SSG signal. 2. Set the output to 0dBm(1V)by main volume. 3. Adjust VR102 so that the output level is -18+3/-3dB down when the output of SSG is set to -20dBu.	SSG Milli-volt meter
FM DIV.	1. Connect the SSG to Main antenna (Red) side. 2. Set the minimum VR101. 3. Input the 98.1MHz/1kHz 22.5kHz(30%) Div. SSG signal. 4. Input the 26dBu SSG signal and adjust VR101 so that an output of TP101(DIV-ADJ) becomes High from Low. 5. Confirm that TP101(DIV-ADJ) becomes Low from High within about three seconds of input the 22dBu SSG signal. 6. Confirm that TP101(DIV-ADJ) becomes 10.0V from 2.0V within about one second of input the 30dBu SSG signal. 7. Confirm that TP101(DIV-ADJ) is as follows 1.0V within five seconds of input the 20dBu SSG signal.	SSG Milli-volt meter Oscilloscope

BLOCK DIAGRAM

Main section

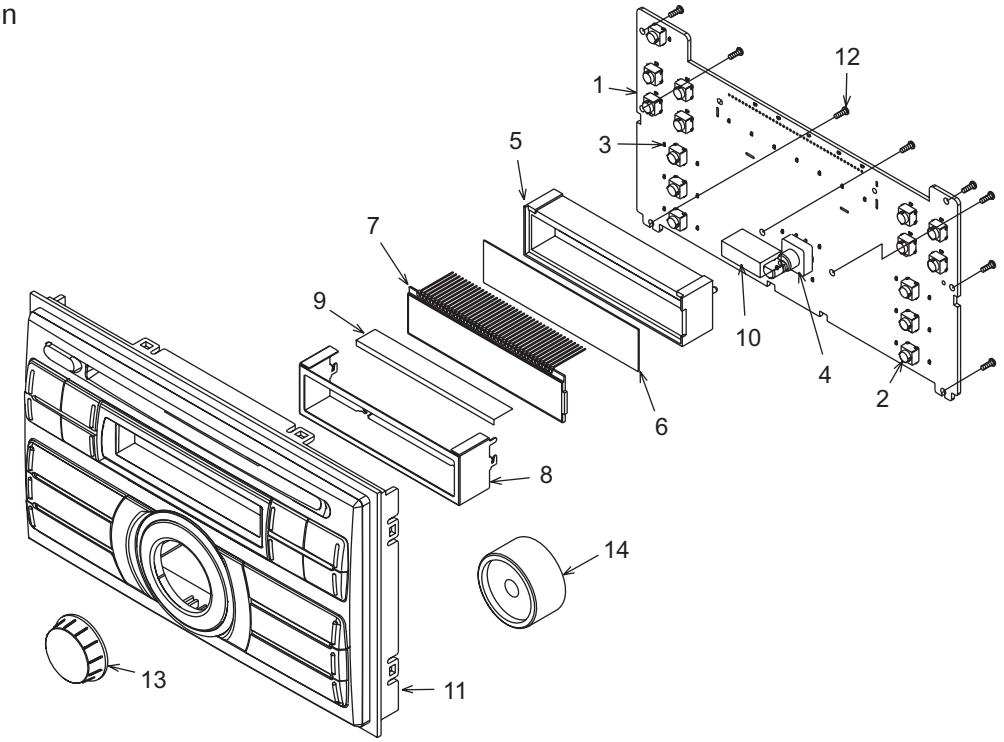


Mechanism section



EXPLODED VIEW/PARTS LIST

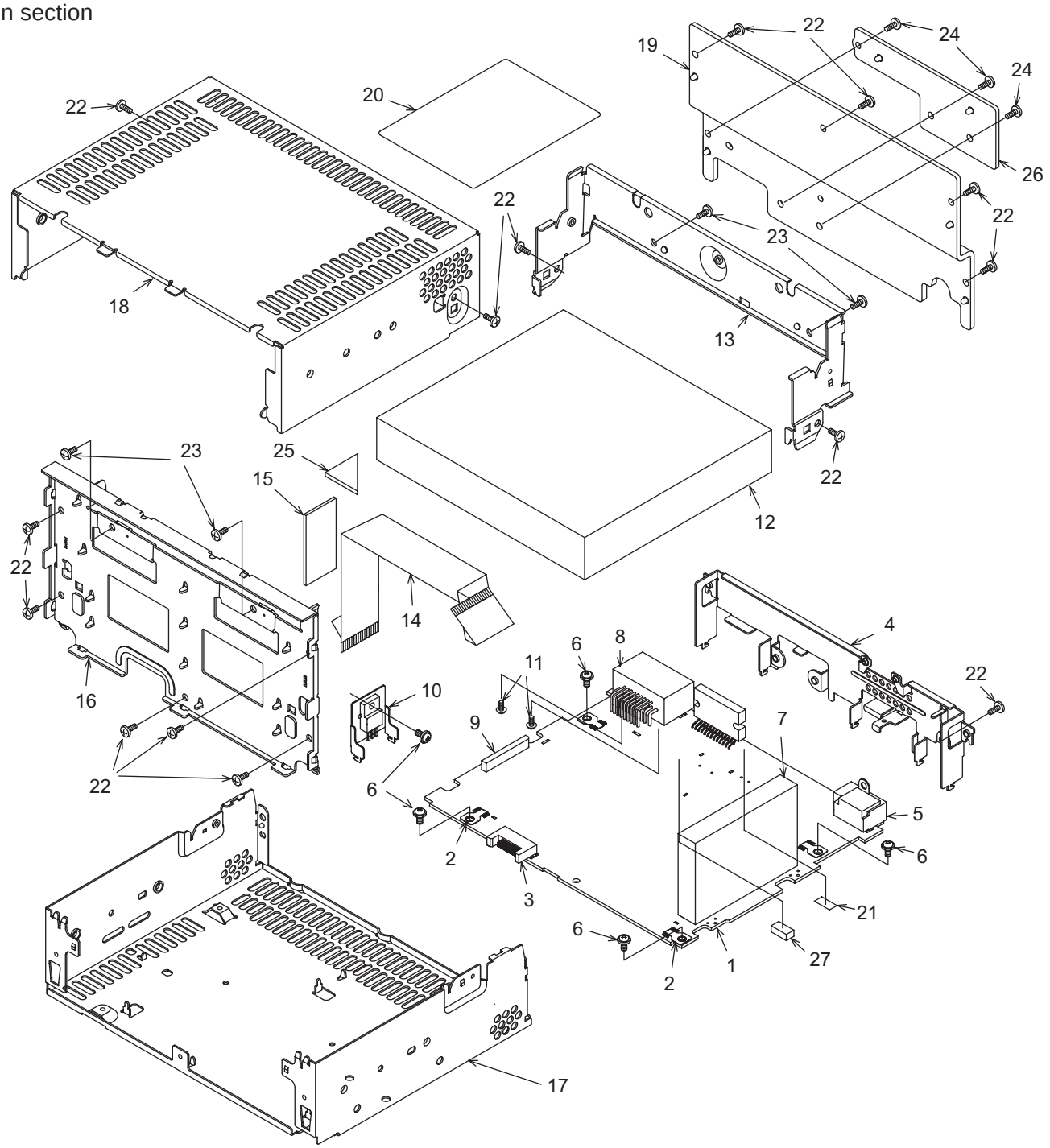
Escutcheon section



NO.	PART NO.	DESCRIPTION	Q'TY
1	----------	SWITCH PWB	1
2	013-6201-52	TACT SWITCH	15
3	001-7093-91	LED YELLOW	32
4	016-0026-00	ROTARY ENCODER	1
5	335-7532-30	LCD HOLDER	1
6	335-7770-00	COLOR FILTER	1
7	379-1379-30	INDICATOR	1

NO.	PART NO.	DESCRIPTION	Q'TY
8	331-4048-00	LCD-CVR	1
9	345-5877-00	PROTECTOR	1
10	074-3014-64	OUTLET SOCKET	1
11	940-8188-00	ESCUTCHEON-ASSY	1
12	716-0778-50	WAVE SCREW(M2x6)	8
13	380-5689-00	KNOB	1
14	335-7959-00	ILLUMI PLATE	1

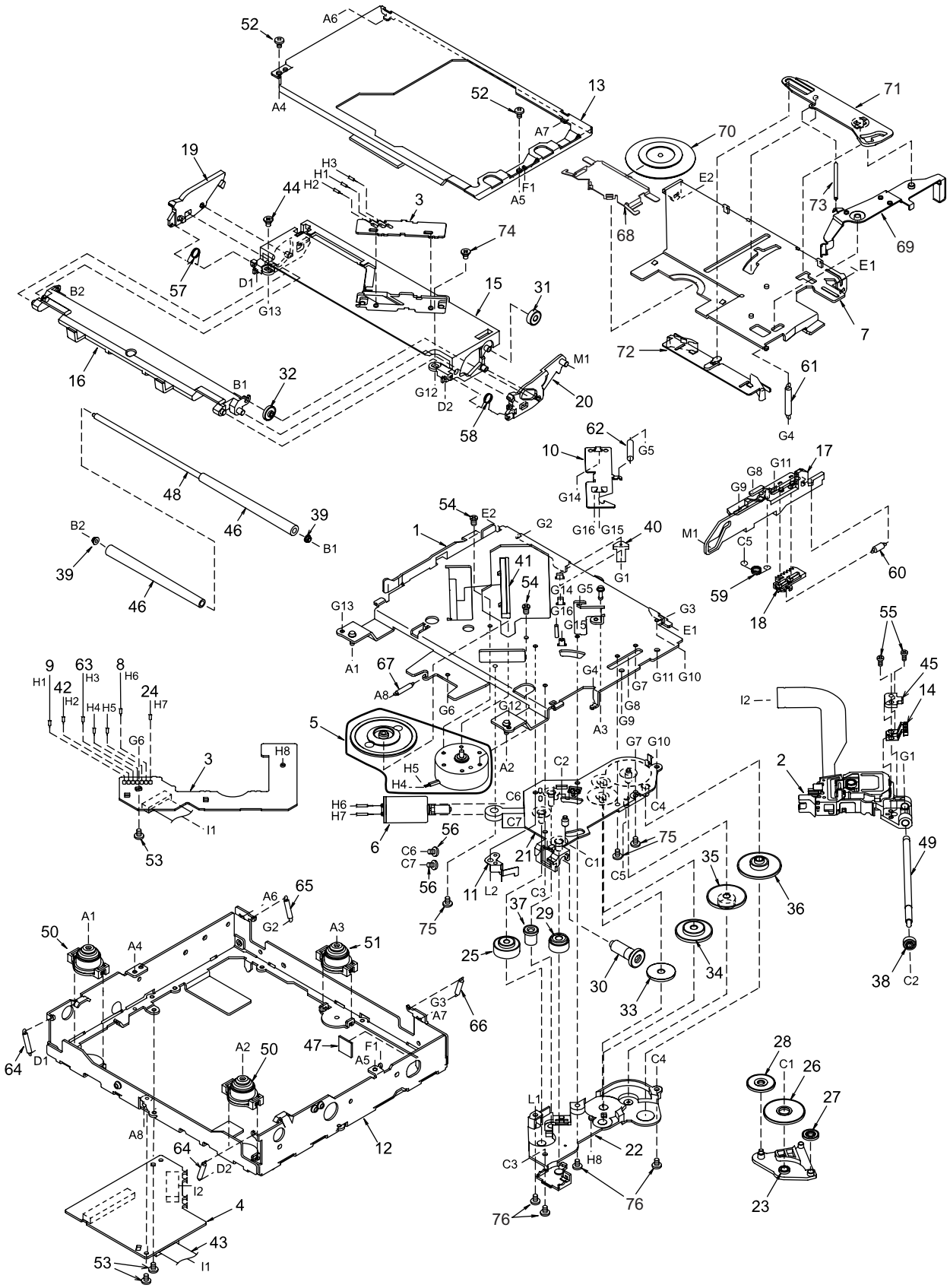
Main section



NO.	PART NO.	DESCRIPTION	Q'TY
1	----------	MAIN PWB	1
2	073-0768-90	TERMINAL	4
3	076-3011-64	14P PLUG	1
4	331-4040-00	REAR PLATE	1
5	092-2210-00	ANT-RECEPT	1
6	716-0878-50	SCREW(M2.6x5)	5
7	880-1921C	TUNER BLOCK	1
8	074-4009-20	OUTLET SOCKET	1
9	074-2003-76	OUTLET SOCKET	1
10	331-3835-00	TR HOLDER	1
11	778-3006-00	TAP-SCREW(M3x5)	2
12	929-5001-81	CD MCHANISM	1
13	331-4038-00	MECH-BRKT	1
14	816-4022-50	FLAT WIRE	1

NO.	PART NO.	DESCRIPTION	Q'TY
15	347-7400-00	WIRE SUPPORT	1
16	331-4039-00	ES-PLATE	1
17	311-1907-00	LOWER CASE	1
18	310-1814-00	UPPER CASE	1
19	313-1950-40	HEAT SINK	1
20	276-0206-01 276-0206-05	SETPLATE(PP-2898H-C) SETPLATE(PP-2898H-F)	1
21	347-8258-00	SPACER	1
22	714-2606-8B	MACHINE SCREW(M2.6x6)	1
23	714-2603-8H	MACHINE SCREW(M2.6x3)	1
24	714-2612-8H	MACHINE SCREW(M2.6x12)	1
25	345-5802-00	CUSHION RUBBER	1
26	313-2005-00	SUB-HEAT SINK	1
27	345-4220-10	RUBBER PART	1

CD Mechanism section



PP-2898H-C,F

NO.	PART NO.	DESCRIPTION	Q'TY
1	966-1743-21	DRIVE-PLT-ASSY	1
2	969-0071-30	PICKUP-ASSY	1
3	----------	LED PWB	1
4	----------	CD PWB	1
5	SMA-182-100	MOTOR ASSY(SPINDLE)	1
6	SMA-183-100	MOTOR ASSY(SLED)	1
7	620-1596-23	CLAMPER LINK	1
8	803-4906-60	VINYL-COAT-WIRE(ORG)	1
9	816-2591-00	LEAD(YEL)	1
10	620-1753-20	ID-LOCK PLATE	1
11	620-1026-21	SPRING PLATE	1
12	620-1754-20	LOWER CHASSIS	1
13	620-1598-22	UPPER CHASSIS	1
14	966-1722-20	SH-RACK-ASSY	1
15	621-1742-20	UPPER GUIDE	1
16	621-0718-21	ROLLER GUIDE	1
17	621-1743-20	SHIFT LEVER	1
18	621-1744-20	RACK	1
19	621-1745-20	LOCK ARM L	1
20	621-1746-20	LOCK ARM R	1
21	621-1754-20	GEAR BASE	1
22	621-1747-20	GEAR COVER	1
23	621-1719-20	IDLE CASE	1
24	816-2590-00	LEAD(GRN)	1
25	621-0608-21	SECOND GEAR	1
26	621-0609-20	BASE GEAR	1
27	621-0610-20	IDLE GEAR A	1
28	621-0611-20	IDLE GEAR B	1
29	621-0612-21	ROLLER GEAR A	1
30	621-0719-20	ROLLER GEAR	1
31	621-0720-20	ROLLER GEAR C	1
32	621-0721-20	ROLLER GEAR D	1
33	621-1748-20	POWER GEAR A	1
34	621-1749-20	POWER GEAR B	1
35	621-1750-20	POWER GEAR C	1
36	621-1751-20	POWER GEAR D	1
37	621-0620-20	THREAD GEAR A	1
38	621-0621-20	THREAD GEAR B	1

NO.	PART NO.	DESCRIPTION	Q'TY
39	621-1726-20	ROLLER SLEEVE	2
40	621-0623-23	LS-HOLDER	1
41	621-0624-22	GUIDE RAIL	1
42	816-2593-00	LEAD(PUR)	1
43	816-2542-01	FLAT WIRE	1
44	716-3473-01	SCREW(M2x3)	1
45	621-1729-20	SH-BASE	1
46	621-0711-20	LOADING ROLLER	2
47	345-5476-20	CUSHION RUBBER	1
48	622-1571-21	ROLLER SHAFT	1
49	624-0020-00	LEAD SCREW	1
50	629-0086-20	DAMPER F	2
51	629-0087-20	DAMPER R	1
52	714-2003-8B	MACHIN SCREW(M2x3)	2
53	716-1507-01	SCREW(M2x3)	3
54	716-1733-01	SCREW(M1.7x2.3)	2
55	716-3469-01	SCREW(M3x4)	2
56	716-3551-00	SCREW(M1.4x2.5)	2
57	750-6797-20	ROLLER SPRING L	1
58	750-6798-20	ROLLER SPRING R	1
59	750-3467-21	SHIFT SPRING	1
60	750-3468-20	RACK SPRING	1
61	750-3469-20	CLAMPER SPRING	1
62	750-3470-20	ID-LOCK SPRING	1
63	816-2592-00	LEAD(BLU)	1
64	750-3472-21	DR-SPRING F	2
65	750-3473-20	DR-SPRING RA	1
66	750-3474-20	DR-SPRING RB	1
67	750-3475-21	DR-SPRING C	1
68	620-1023-23	CLAMPER PLATE	1
69	620-1752-20	SENSOR ARM	1
70	621-1753-20	CLAMPER RING	1
71	621-0728-20	STOPPER LINK	1
72	621-1752-20	DISC STOPPER	1
73	750-3471-20	SENSOR SPRING	1
74	781-1730-00	SCREW(M1.7x3)	1
75	780-2025-00	SCREW(M2x2.5)	3
76	716-1670-01	SCREW(M2x4)	4

ELECTRICAL PARTS LIST

Main PWB(B1) section

Note) Several different parts of the same reference number are alternative parts. One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION
ANT101	092-2210-00	ANTENNA RECEPT
BL101	880-1921C	TUNER PACK
C101	178-1542-78	0.15uF
C102	168-1032-55	0.01uF K
C103	168-1032-55	0.01uF K
C104	168-2222-55	2200pF K
C105	168-1052-78	1uF
C106	168-1042-78	16V 0.1uF
C107	188-1063-38	16V 10uF
C108	166-1511-50	150pF CH
C109	166-4701-50	47pF CH
C110	166-4701-50	47pF CH
C111	168-3322-55	3300pF K
C112	168-1022-55	1000pF K
C113	168-1022-55	1000pF K
C114	166-1501-50	15pF CH
C115	168-4732-78	0.047uF K
C116	168-1022-55	1000pF K
C117	166-2201-50	22pF CH
C118	187-1073-37	16V 100uF
C119	168-1022-55	1000pF K
C120	178-1052-78	1uF
C121	166-1201-50	12pF CH
C122	166-1007-50	10pF CH
C123	168-1042-78	16V 0.1uF
C126	188-1073-28	10V 100uF
C127	166-2201-50	22pF CH
C128	043-0277-51	0.022uF
C129	168-1042-78	16V 0.1uF
C130	188-1073-28	10V 100uF
C131	168-1022-55	1000pF K
C132	166-2201-50	22pF CH
C133	168-1042-78	16V 0.1uF
C134	042-1458-93	50V 2.2uF
C135	168-8212-55	820pF K
C136	166-2201-50	22pF CH
C137	168-4712-55	470pF K
C138	187-4763-37	16V 47uF
C139	166-1011-50	100pF CH
C141	166-1011-50	100pF CH
C142	168-1042-78	16V 0.1uF
C143	188-1073-28	10V 100uF
C144	168-1052-78	1uF
C147	168-1022-55	1000pF K
C148	178-1042-78	0.1uF
C150	188-3363-28	10V 33uF
C151	168-3932-78	0.039uF K
C152	168-1042-78	16V 0.1uF
C153	168-3932-78	0.039uF K
C154	188-3353-68	50V 3.3uF
C155	168-2245-79	0.22uF Z
C156	168-3332-78	0.033uF K
C157	168-1032-55	0.01uF K
C158	168-6832-78	0.068uF K
C159	168-2222-55	2200pF K
C160	168-3332-78	0.033uF K
C161	168-4722-55	4700pF K
C162	168-3332-78	0.033uF K
C163	178-2255-79	2.2uF
C164	168-3332-78	0.033uF K
C165	178-2255-79	2.2uF
C166	168-5632-78	16V 0.056uF
C167	168-2232-55	0.022uF K
C168	168-1022-55	1000pF K
C169	168-8212-55	820pF K
C170	166-1007-50	10pF CH
C171	166-1007-50	10pF CH
C172	166-1007-50	10pF CH
C201	166-1007-50	10pF CH
C202	168-1042-78	16V 0.1uF
C203	168-1022-55	1000pF K

REF No.	PART No.	DESCRIPTION
C204	163-3363-45	25V 33uF
C205	168-1022-55	1000pF K
C206	166-1011-50	100pF CH
C207	166-1011-50	100pF CH
C208	166-1011-50	100pF CH
C209	166-1011-50	100pF CH
C212	166-2201-50	22pF CH
C213	168-1042-78	16V 0.1uF
C215	168-1042-78	16V 0.1uF
C216	187-1073-27	10V 100uF
C218	168-1052-78	1uF
C219	168-1042-78	16V 0.1uF
C220	166-1007-50	10pF CH
C301	168-1052-78	1uF
C302	178-1242-78	0.12uF
C303	178-1242-78	0.12uF
C304	178-1242-78	0.12uF
C305	178-1242-78	0.12uF
C306	168-1052-78	1uF
C307	188-2263-18	6.3V 22uF
C308	178-4742-78	0.47uF
C309	168-1222-55	1200pF K
C310	168-1222-55	1200pF K
C311	178-4742-78	0.47uF
C312	168-1052-78	1uF
C313	168-1052-78	1uF
C314	178-1842-78	0.18uF
C315	178-1842-78	0.18uF
C316	178-1842-78	0.18uF
C317	178-1842-78	0.18uF
C318	168-8212-55	820pF K
C319	168-8212-55	820pF K
C320	168-8212-55	820pF K
C321	168-8212-55	820pF K
C322	188-1063-38	16V 10uF
C323	188-1063-38	16V 10uF
C324	168-1832-55	0.018uF K
C401	188-4763-38	16V 47uF
C403	042-0416-59	10V 33uF M TAN
C405	168-1042-78	16V 0.1uF
C407	168-1042-78	16V 0.1uF
C408	042-1452-82	16V 100uF
C409	168-4742-78	0.47uF
C410	168-1052-78	1uF
C411	168-4722-55	4700pF K
C412	188-1063-38	16V 10uF
C413	178-6832-78	0.068uF
C414	178-6832-78	0.068uF
C415	178-4742-78	0.47uF
C416	178-4742-78	0.47uF
C417	187-2253-67	50V 2.2uF
C418	166-1011-50	100pF CH
C419	188-1063-38	16V 10uF
C420	168-1042-78	16V 0.1uF
C421	188-1063-38	16V 10uF
C422	172-1041-15	0.1uF
C423	189-3383-32	16V 3300uF
C425	168-6822-55	6800pF K
C426	168-6822-55	6800pF K
C427	168-6822-55	6800pF K
C428	168-6822-55	6800pF K
C429	168-1042-78	16V 0.1uF
C430	168-6822-55	6800pF K
C431	168-6822-55	6800pF K
C432	168-6822-55	6800pF K
C433	168-6822-55	6800pF K
C435	168-1042-78	16V 0.1uF
C436	168-1042-78	16V 0.1uF
C437	188-1063-38	16V 10uF
C438	168-1042-78	16V 0.1uF
C439	168-1042-78	16V 0.1uF

REF No.	PART No.	DESCRIPTION
C440	188-1053-68	50V 1uF
C442	168-1022-55	1000pF K
C443	168-1022-55	1000pF K
C444	178-4742-78	0.47uF
C445	178-6832-78	0.068uF
C446	178-6832-78	0.068uF
C447	178-4742-78	0.47uF
C448	178-4742-78	0.47uF
C450	168-1042-78	16V 0.1uF
C451	172-1041-15	0.1uF
C452	166-2201-50	22pF CH
C453	166-2201-50	22pF CH
C454	166-2201-50	22pF CH
C455	166-2201-50	22pF CH
C501	188-1063-38	16V 10uF
C502	188-1063-38	16V 10uF
C503	188-1063-38	16V 10uF
C504	188-1063-38	16V 10uF
C509	166-2201-50	22pF CH
C510	166-2201-50	22pF CH
C513	166-2201-50	22pF CH
C514	166-2201-50	22pF CH
C515	166-2201-50	22pF CH
C516	166-2201-50	22pF CH
C519	166-2201-50	22pF CH
C520	166-2201-50	22pF CH
C521	178-4722-78	4700pF
C522	178-6822-78	6800pF
C523	178-5622-78	5600pF
C524	178-1232-78	0.012uF
C525	166-2201-50	22pF CH
C526	166-2201-50	22pF CH
C527	166-2201-50	22pF CH
C528	166-2201-50	22pF CH
C529	178-5622-78	5600pF
C530	178-1232-78	0.012uF
C531	178-4722-78	4700pF
C532	178-6822-78	6800pF
C533	178-1042-78	0.1uF
C534	178-1042-78	0.1uF
C535	178-1242-78	0.12uF
C536	178-1242-78	0.12uF
C537	178-8232-78	0.082uF
C538	178-8232-78	0.082uF
C539	178-5632-78	0.056uF
C540	178-5632-78	0.056uF
C541	166-2201-50	22pF CH
C542	166-2201-50	22pF CH
C543	166-2201-50	22pF CH
C544	166-2201-50	22pF CH
C545	166-2201-50	22pF CH
C546	166-2201-50	22pF CH
C547	166-2201-50	22pF CH
C548	166-2201-50	22pF CH
C549	178-1242-78	0.12uF
C550	178-1242-78	0.12uF
C551	178-4732-78	0.047uF
C552	178-4732-78	0.047uF
C553	043-0309-92	10V 0.68uF
C554	043-0309-92	10V 0.68uF
C555	178-2232-78	0.022uF
C556	178-2232-78	0.022uF
C557	178-6832-78	0.068uF
C558	178-6832-78	0.068uF
C559	178-1042-78	0.1uF
C560	178-1042-78	0.1uF
C561	178-6832-78	0.068uF
C562	178-1042-78	0.1uF
C563	166-2201-50	22pF CH
C564	166-2201-50	22pF CH
C565	166-2201-50	22pF CH

REF No.	PART No.	DESCRIPTION
C566	166-2201-50	22pF CH
C567	178-6832-78	0.068uF
C568	178-1042-78	0.1uF
C571	188-1063-38	16V 10uF
CCT201	050-0145-52	1/16W 1k ohm x4
CCT202	050-0145-52	1/16W 1k ohm x4
CCT203	050-0145-52	1/16W 1k ohm x4
CCT204	050-0145-52	1/16W 1k ohm x4
CCT205	050-0145-52	1/16W 1k ohm x4
CCT206	050-0145-52	1/16W 1k ohm x4
CCT207	050-0145-52	1/16W 1k ohm x4
CCT208	050-0145-52	1/16W 1k ohm x4
CCT209	050-0145-52	1/16W 1k ohm x4
CCT211	050-0145-52	1/16W 1k ohm x4
CCT212	050-0145-52	1/16W 1k ohm x4
D101	001-0466-90	S5688B
D102	001-9008-90	1SV250
D103	001-9008-90	1SV250
D401	001-0529-48	MA8091-H
D402	001-0516-90	MA111
D403	001-0466-90	S5688B
D404	001-0516-90	MA111
D405	001-0504-31	HZS6A2L
D406	001-0504-45	HZS9B1L
D407	001-2015-00	RL253
D408	001-0529-48	MA8091-H
D409	001-0529-34	MA8062-L
D410	001-0466-90	S5688B
IC101	051-4617-90	LA1061M-TE-L
IC102	051-3020-90	NJM4565V
IC103	051-4618-90	HA12181FP-EL-E
IC201	052-1187-10	LC723663-9D49-E
IC301	051-5029-00	LC75412EH
IC401	051-3341-90	BD3931FP
IC402	051-2037-00	TDA7560
IC501	051-3019-90	NJM2060V
IC502	051-3019-90	NJM2060V
IC503	051-3019-90	NJM2060V
IC504	051-3019-90	NJM2060V
IC505	051-3019-90	NJM2060V
J201	074-2003-76	SOCKET(26P)
J202	076-3011-64	14P
J401	074-4009-20	20P
JW401	060-0054-03	JUMPER
JW402	060-0054-03	JUMPER
JW403	060-0054-03	JUMPER
L101	010-2198-65	0.1uH
L102	010-2198-53	5.6uH
L103	010-2312-52	0.27uH
L104	010-2003-04	30uH
L105	010-3407-75	120uH J
L201	010-6009-64	2.2uH J
L401	009-0680-60	200uH
Q101	192-4116-00	2SC4116
Q102	192-4116-00	2SC4116
Q103	125-2026-91	UN5211
Q104	125-2026-91	UN5211
Q105	192-4116-51	2SC4116 G,L
Q106	192-4116-51	2SC4116 G,L
Q108	190-1162-00	2SA1162
Q109	190-1162-00	2SA1162
Q205	125-0002-92	RN2402
Q401	193-2118-00	2SD2118F5 Q,R,S
Q402	191-1197-50	2SB1197K Q,R
Q403	125-2026-91	UN5211
Q404	125-0020-91	UN5111
Q405	125-2026-91	UN5211
Q406	191-1240-00	2SB1240
Q407	125-2026-95	UN521N
Q408	193-1858-00	2SD1858
Q409	125-9003-92	IMD3
Q410	103-2012-00	2SD2012
Q411	125-2026-91	UN5211
Q412	193-2118-00	2SD2118F5 Q,R,S

REF No.	PART No.	DESCRIPTION
Q414	193-1306-00	2SD1306
Q415	192-2712-00	2SC2712
Q416	192-2712-00	2SC2712
Q501	192-2712-00	2SC2712
R101	119-1041-15	1/10W 100k ohm
R102	119-1041-15	1/10W 100k ohm
R103	119-2731-15	1/10W 27k ohm
R104	119-2731-15	1/10W 27k ohm
R105	119-1041-15	1/10W 100k ohm
R107	119-1041-15	1/10W 100k ohm
R108	119-1031-15	1/10W 10k ohm
R109	119-1031-15	1/10W 10k ohm
R110	119-5631-15	1/10W 56k ohm
R111	119-3911-15	1/10W 390 ohm
R112	119-4731-15	1/10W 47k ohm
R113	119-1021-15	1/10W 1k ohm
R114	119-1031-15	1/10W 10k ohm
R115	119-1031-15	1/10W 10k ohm
R116	119-1011-15	1/10W 100 ohm
R117	119-4741-15	1/10W 470k ohm
R118	119-1021-15	1/10W 1k ohm
R119	119-1021-15	1/10W 1k ohm
R121	119-2221-15	1/10W 2.2k ohm
R122	119-2221-15	1/10W 2.2k ohm
R123	119-2721-15	1/10W 2.7k ohm
R124	119-1021-15	1/10W 1k ohm
R125	119-8201-15	1/10W 82 ohm
R126	119-1021-15	1/10W 1k ohm
R127	119-1021-15	1/10W 1k ohm
R130	119-0000-05	1/10W 0 ohm JW
R132	119-1001-15	1/10W 10 ohm
R133	119-1001-15	1/10W 10 ohm
R134	119-1501-15	1/10W 15 ohm
R135	119-1041-15	1/10W 100k ohm
R136	119-4731-15	1/10W 47k ohm
R137	119-2731-15	1/10W 27k ohm
R138	119-1231-15	1/10W 12k ohm
R139	119-1021-15	1/10W 1k ohm
R140	119-1021-15	1/10W 1k ohm
R141	119-1841-15	1/10W 180k ohm
R142	119-2221-15	1/10W 2.2k ohm
R143	119-1031-15	1/10W 10k ohm
R144	119-5621-15	1/10W 5.6k ohm
R146	119-1031-15	1/10W 10k ohm
R147	119-2221-15	1/10W 2.2k ohm
R148	119-1021-15	1/10W 1k ohm
R149	119-6821-15	1/10W 6.8k ohm
R201	119-1021-15	1/10W 1k ohm
R202	119-1021-15	1/10W 1k ohm
R203	119-1031-15	1/10W 10k ohm
R204	119-0000-05	1/10W 0 ohm JW
R205	119-4731-15	1/10W 47k ohm
R206	119-1031-15	1/10W 10k ohm
R207	119-4731-15	1/10W 47k ohm
R208	119-3311-15	1/10W 330 ohm
R209	119-3311-15	1/10W 330 ohm
R210	119-4731-15	1/10W 47k ohm
R211	119-1031-15	1/10W 10k ohm
R212	119-1031-15	1/10W 10k ohm
R213	119-1031-15	1/10W 10k ohm
R214	119-4731-15	1/10W 47k ohm
R215	119-4731-15	1/10W 47k ohm
R217	119-1031-15	1/10W 10k ohm
R218	119-1031-15	1/10W 10k ohm
R219	119-4731-15	1/10W 47k ohm
R220	119-2231-15	1/10W 22k ohm
R222	119-1031-15	1/10W 10k ohm
R223	119-1041-15	1/10W 100k ohm
R224	119-1031-15	1/10W 10k ohm
R226	119-4731-15	1/10W 47k ohm
R228	119-1031-15	1/10W 10k ohm
R229	119-1021-15	1/10W 1k ohm
R230	119-1031-15	1/10W 10k ohm
R235	119-1031-15	1/10W 10k ohm

REF No.	PART No.	DESCRIPTION
R236	119-1041-15	1/10W 100k ohm
R237	119-4731-15	1/10W 47k ohm
R238	119-4731-15	1/10W 47k ohm
R240	119-2231-15	1/10W 22k ohm
R241	119-0000-05	1/10W 0 ohm JW
R242	119-3341-15	1/10W 330k ohm
R303	119-0000-05	1/10W 0 ohm JW
R304	119-0000-05	1/10W 0 ohm JW
R305	119-0000-05	1/10W 0 ohm JW
R306	119-0000-05	1/10W 0 ohm JW
R307	119-0000-05	1/10W 0 ohm JW
R308	119-0000-05	1/10W 0 ohm JW
R309	119-1821-15	1/10W 1.8k ohm
R310	119-3931-15	1/10W 39k ohm
R311	119-3931-15	1/10W 39k ohm
R312	119-1821-15	1/10W 1.8k ohm
R313	119-4721-15	1/10W 4.7k ohm
R314	119-4721-15	1/10W 4.7k ohm
R315	119-4721-15	1/10W 4.7k ohm
R316	119-4721-15	1/10W 4.7k ohm
R401	116-4711-15	1/4W 470 ohm
R402	116-1821-15	1/4W 1.8k ohm
R403	119-2231-15	1/10W 22k ohm
R404	119-4741-15	1/10W 470k ohm
R405	119-1231-15	1/10W 12k ohm
R406	119-1021-15	1/10W 1k ohm
R407	119-1031-15	1/10W 10k ohm
R408	119-2231-15	1/10W 22k ohm
R409	119-2231-15	1/10W 22k ohm
R410	119-2231-15	1/10W 22k ohm
R411	119-2231-15	1/10W 22k ohm
R412	116-1091-15	1/4W 1 ohm
R413	116-1221-15	1/4W 1.2k ohm
R414	119-1031-15	1/10W 10k ohm
R415	119-0000-05	1/10W 0 ohm JW
R417	116-2211-15	1/4W 220 ohm
R418	119-1041-15	1/10W 100k ohm
R419	119-4731-15	1/10W 47k ohm
R420	116-3911-15	1/4W 390 ohm
R421	116-3911-15	1/4W 390 ohm
R422	119-1041-15	1/10W 100k ohm
R423	116-6811-15	1/4W 680 ohm
R426	116-2721-15	1/4W 2.7k ohm
R428	119-5611-15	1/10W 560 ohm
R429	119-1031-15	1/10W 10k ohm
R430	116-1831-15	1/4W 18k ohm
R431	119-4721-15	1/10W 4.7k ohm
R432	119-5611-15	1/10W 560 ohm
R433	116-4791-15	1/4W 4.7 ohm
R434	116-4791-15	1/4W 4.7 ohm
R436	116-1531-15	1/4W 15k ohm
R437	119-0000-05	1/10W 0 ohm JW
R439	117-3941-15	1/8W 390k ohm
R440	117-3941-15	1/8W 390k ohm
R446	119-0000-05	1/10W 0 ohm JW
R501	119-3331-15	1/10W 33k ohm
R502	119-3331-15	1/10W 33k ohm
R503	119-3331-15	1/10W 33k ohm
R504	119-3331-15	1/10W 33k ohm
R505	119-2231-15	1/10W 22k ohm
R506	119-2231-15	1/10W 22k ohm
R507	119-2231-15	1/10W 22k ohm
R508	119-2231-15	1/10W 22k ohm
R513	119-4721-15	1/10W 4.7k ohm
R514	119-1031-15	1/10W 10k ohm
R515	119-1031-15	1/10W 10k ohm
R516	119-4721-15	1/10W 4.7k ohm
R521	119-4721-15	1/10W 4.7k ohm
R522	119-1031-15	1/10W 10k ohm
R523	119-1031-15	1/10W 10k ohm
R524	119-4721-15	1/10W 4.7k ohm
R525	119-2221-15	1/10W 2.2k ohm
R528	119-2221-15	1/10W 2.2k ohm
R529	119-2221-15	1/10W 2.2k ohm

REF No.	PART No.	DESCRIPTION
R532	119-2221-15	1/10W 2.2k ohm
R533	119-4721-15	1/10W 4.7k ohm
R536	119-2721-15	1/10W 2.7k ohm
R537	119-5611-15	1/10W 560 ohm
R538	119-5611-15	1/10W 560 ohm
R539	119-4731-15	1/10W 47k ohm
R540	119-4731-15	1/10W 47k ohm
R541	119-4731-15	1/10W 47k ohm
R542	119-4731-15	1/10W 47k ohm
R543	119-5611-15	1/10W 560 ohm
R544	119-5611-15	1/10W 560 ohm
R547	119-4721-15	1/10W 4.7k ohm
R548	119-2721-15	1/10W 2.7k ohm
R549	119-3321-15	1/10W 3.3k ohm
R550	119-3321-15	1/10W 3.3k ohm
R551	119-8211-15	1/10W 820 ohm
R552	119-8211-15	1/10W 820 ohm
R553	119-1511-15	1/10W 150 ohm
R554	119-1511-15	1/10W 150 ohm
R555	119-1511-15	1/10W 150 ohm
R556	119-1511-15	1/10W 150 ohm
R557	119-1541-15	1/10W 150k ohm
R558	119-1541-15	1/10W 150k ohm
R559	119-1541-15	1/10W 150k ohm
R560	119-1541-15	1/10W 150k ohm
R561	119-1541-15	1/10W 150k ohm

REF No.	PART No.	DESCRIPTION
R562	119-1541-15	1/10W 150k ohm
R563	119-1541-15	1/10W 150k ohm
R564	119-1541-15	1/10W 150k ohm
R565	119-1511-15	1/10W 150 ohm
R566	119-1511-15	1/10W 150 ohm
R567	119-1511-15	1/10W 150 ohm
R568	119-1511-15	1/10W 150 ohm
R569	119-8211-15	1/10W 820 ohm
R570	119-8211-15	1/10W 820 ohm
R571	119-2721-15	1/10W 2.7k ohm
R572	119-2721-15	1/10W 2.7k ohm
R573	119-6831-15	1/10W 68k ohm
R574	119-6831-15	1/10W 68k ohm
R575	119-8221-15	1/10W 8.2k ohm
R576	119-4721-15	1/10W 4.7k ohm
R577	119-1031-15	1/10W 10k ohm
R578	119-1031-15	1/10W 10k ohm
R579	119-5131-15	1/10W 51k ohm
R580	119-5131-15	1/10W 51k ohm
R581	119-5131-15	1/10W 51k ohm
R582	119-5131-15	1/10W 51k ohm
R583	119-1031-15	1/10W 10k ohm
R584	119-1031-15	1/10W 10k ohm
R585	119-8221-15	1/10W 8.2k ohm
R586	119-4721-15	1/10W 4.7k ohm
R587	119-6831-15	1/10W 68k ohm

REF No.	PART No.	DESCRIPTION
R588	119-6831-15	1/10W 68k ohm
R589	119-1031-15	1/10W 10k ohm
R590	119-1031-15	1/10W 10k ohm
R591	119-1031-15	1/10W 10k ohm
R592	119-1031-15	1/10W 10k ohm
R593	117-1831-15	1/8W 18k ohm
R594	117-1831-15	1/8W 18k ohm
R595	117-1031-15	1/8W 10k ohm
R596	117-1031-15	1/8W 10k ohm
R597	119-4721-15	1/10W 4.7k ohm
R598	119-6821-15	1/10W 6.8k ohm
R599	119-5111-15	1/10W 510 ohm
SUP101	060-0122-90	DSP-201M-S00B
SUP102	060-0122-90	DSP-201M-S00
TC201	004-1580-60	30pF
TH401	002-0229-90	PTH8L05B
TM101	073-0768-90	TERMINAL
TM102	073-0768-90	TERMINAL
TM401	073-0768-90	TERMINAL
TM402	073-0768-90	TERMINAL
VR101	012-4318-63	470k ohm
VR102	012-4318-56	VR 10k ohm
X201	061-1053-00	4.5MHz
PWB	039-3022-00	PWB(WITHOUT COMPONENTS)

Switch PWB(B2) section

REF No.	PART No.	DESCRIPTION
C601	042-0416-59	10V 33uF M TAN
C602	166-1011-50	100pF CH
C603	168-1042-78	16V 0.1uF
C604	168-1042-78	16V 0.1uF
C605	168-1042-78	16V 0.1uF
C606	168-6812-55	680pF K
C607	168-1052-78	1uF
C608	168-1042-78	16V 0.1uF
C609	168-1052-78	1uF
CCT601	050-0145-52	1/16W 1k ohm x4
CCT602	050-0145-52	1/16W 1k ohm x4
CCT603	050-0145-52	1/16W 1k ohm x4
D602	001-0516-90	MA111
D604	001-0516-90	MA111
D606	001-0516-90	MA111
D608	001-0516-90	MA111
D609	001-0516-90	MA111
D610	001-0516-90	MA111
D611	001-0516-90	MA111
D612	001-0516-90	MA111
D617	001-7093-91	RFY1112H-16-TR YEL
D618	001-7093-91	RFY1112H-16-TR YEL
D619	001-7093-91	RFY1112H-16-TR YEL
D620	001-7093-91	RFY1112H-16-TR YEL
D621	001-7093-91	RFY1112H-16-TR YEL
D622	001-7093-91	RFY1112H-16-TR YEL
D623	001-7093-91	RFY1112H-16-TR YEL
D624	001-7093-91	RFY1112H-16-TR YEL
D625	001-7093-91	RFY1112H-16-TR YEL
D626	001-7093-91	RFY1112H-16-TR YEL
D627	001-7093-91	RFY1112H-16-TR YEL

REF No.	PART No.	DESCRIPTION
D628	001-7093-91	RFY1112H-16-TR YEL
D629	001-7093-91	RFY1112H-16-TR YEL
D630	001-7093-91	RFY1112H-16-TR YEL
D631	001-7093-91	RFY1112H-16-TR YEL
D632	001-7093-91	RFY1112H-16-TR YEL
D633	001-7093-91	RFY1112H-16-TR YEL
D634	001-7093-91	RFY1112H-16-TR YEL
D635	001-7093-91	RFY1112H-16-TR YEL
D636	001-7093-91	RFY1112H-16-TR YEL
D637	001-7093-91	RFY1112H-16-TR YEL
D638	001-7093-91	RFY1112H-16-TR YEL
D639	001-7093-91	RFY1112H-16-TR YEL
D640	001-7093-91	RFY1112H-16-TR YEL
D641	001-7093-91	RFY1112H-16-TR YEL
D642	001-7093-91	RFY1112H-16-TR YEL
D643	001-7093-91	RFY1112H-16-TR YEL
D644	001-7093-91	RFY1112H-16-TR YEL
D645	001-7093-91	RFY1112H-16-TR YEL
D646	001-7093-91	RFY1112H-16-TR YEL
D647	001-7093-91	RFY1112H-16-TR YEL
D648	001-7093-91	RFY1112H-16-TR YEL

REF No.	PART No.	DESCRIPTION
IC601	051-6000-10	LC75853NE
J601	074-3014-64	SOCKET(14P)
R601	119-1021-15	1/10W 1k ohm
R602	119-1021-15	1/10W 1k ohm
R603	119-1021-15	1/10W 1k ohm
R604	119-1021-15	1/10W 1k ohm
R605	119-1021-15	1/10W 1k ohm
R606	119-1021-15	1/10W 1k ohm
R607	119-1021-15	1/10W 1k ohm
R608	119-1021-15	1/10W 1k ohm
R609	119-1021-15	1/10W 1k ohm
R610	119-1021-15	1/10W 1k ohm
R611	119-1021-15	1/10W 1k ohm
R612	116-2021-15	1/4W 2k ohm
R613	116-2421-15	1/4W 2.4k ohm
R614	119-6831-15	1/10W 68k ohm
R615	116-2421-15	1/4W 2.4k ohm
R616	116-3621-15	1/4W 3.6k ohm
R617	116-3621-15	1/4W 3.6k ohm
R618	116-1821-15	1/4W 1.8k ohm
R619	116-2421-15	1/4W 2.4k ohm
R620	116-2421-15	1/4W 2.4k ohm
R621	116-2221-15	1/4W 2.2k ohm
R622	116-3321-15	1/4W 3.3k ohm
R624	116-2021-15	1/4W 2k ohm
R625	116-3321-15	1/4W 3.3k ohm
R626	116-1521-15	1/4W 1.5k ohm
R627	116-1521-15	1/4W 1.5k ohm
R628	116-3921-15	1/4W 3.9k ohm
S601	013-6201-52	SKPMAP010
S602	013-6201-52	SKPMAP010
S603	013-6201-52	SKPMAP010
S604	013-6201-52	SKPMAP010
S605	013-6201-52	SKPMAP010
S606	013-6201-52	SKPMAP010
S607	013-6201-52	SKPMAP010
S608	013-6201-52	SKPMAP010
S609	013-6201-52	SKPMAP010
S610	013-6201-52	SKPMAP010
S611	013-6201-52	SKPMAP010
S612	013-6201-52	SKPMAP010
S613	013-6201-52	SKPMAP010

REF No.	PART No.	DESCRIPTION
S614	013-6201-52	SKPMAP010
S615	013-6201-52	SKPMAP010
TM601	073-0778-90	TERMINAL

REF No.	PART No.	DESCRIPTION
TM602	073-0778-90	TERMINAL
VR601	016-0026-00	ROTARY ENCODER

REF No.	PART No.	DESCRIPTION
PWB	039-3023-00	PWB(WITHOUT COMPONENTS)

CD PWB(B3) section

REF No.	PART No.	DESCRIPTION
C1	168-1042-78	16V 0.1uF
C3	163-2273-05	4V220uF
C4	168-1042-78	16V 0.1uF
C5	163-1073-35	16V100uF
C6	163-1073-35	16V100uF
C7	168-1042-78	16V 0.1uF
C9	178-1052-78	1uF
C10	042-0560-85	6.3V100uF
C11	046-4712-58	470pF
C12	178-1052-78	1uF
C13	046-4712-58	470pF
C15	168-1042-78	16V 0.1uF
C16	168-4732-78	0.047uF
C17	168-4732-78	0.047uF
C18	168-1042-78	16V 0.1uF
C19	168-1042-78	16V 0.1uF
C21	046-6822-58	6800pF
C22	046-3332-78	0.033uF
C24	178-1052-78	1uF
C25	168-1042-78	16V 0.1uF
C26	168-1042-78	16V 0.1uF
C28	168-1042-78	16V 0.1uF
C29	168-1042-78	16V 0.1uF
C30	045-6801-50	68pF
C31	168-1042-78	16V 0.1uF
C32	168-1042-78	16V 0.1uF
C33	046-1532-78	0.015uF
C34	168-1042-78	16V 0.1uF

REF No.	PART No.	DESCRIPTION
C35	046-6812-58	680pF
C36	168-1042-78	16V 0.1uF
C37	168-1042-78	16V 0.1uF
C38	046-1522-58	1500pF
C39	046-4722-58	4700pF
C40	046-1032-78	0.01uF
C41	046-1532-78	0.015uF
C43	168-1042-78	16V 0.1uF
C47	045-4701-50	47pF
C48	168-1042-78	16V 0.1uF
C49	168-1042-78	16V 0.1uF
C50	042-0666-00	12.5V 22uF
C51	046-5622-58	5600pF
C52	178-1052-78	1uF
C53	045-1007-50	10pF
C54	045-1007-50	10pF
C55	178-1052-78	1uF
CCT2	050-0140-63	1/32W 47k ohm x4J
D1	001-0367-91	1SS226
IC1	051-6071-08	BA5825FP-E2
IC2	051-6399-00	TC94A15F
J101	074-1228-76	26P
J201	074-1138-65	15P
J301	074-1138-60	10P
Q1	131-1188-50	2SB1188PQR
Q2	131-1188-50	2SB1188PQR
R1	117-6811-15	1/8W 680 ohm
R2	117-1001-15	1/8W 10 ohm

REF No.	PART No.	DESCRIPTION
R9	033-2211-15	1/10W 220 ohm
R11	033-1051-15	1/10W 1M ohm
R12	119-2221-15	1/10W 2.2k ohm
R13	033-2211-15	1/10W 220 ohm
R14	033-2211-15	1/10W 220 ohm
R16	033-2231-15	1/10W 22k ohm
R17	033-3921-15	1/10W 3.9k ohm
R18	033-3341-15	1/10W 330k ohm
R19	033-5621-15	1/10W 5.6k ohm
R21	033-2231-15	1/10W 22k ohm
R22	033-4731-15	1/10W 47k ohm
R24	033-1041-15	1/10W 100k ohm
R26	033-1531-15	1/10W 15k ohm
R27	033-4731-15	1/10W 47k ohm
R28	033-1831-15	1/10W 18k ohm
R29	033-6821-15	1/10W 6.8k ohm
R30	033-8231-15	1/10W 82k ohm
R31	033-8231-15	1/10W 82k ohm
R32	119-1001-15	1/10W 10 ohm
R33	033-2731-15	1/10W 27k ohm
R34	033-2731-15	1/10W 27k ohm
R35	033-2731-15	1/10W 27k ohm
R36	033-2731-15	1/10W 27k ohm
R37	032-0162-50	1/10W 0.51 ohm
TM1	073-0768-00	TERMINAL
X2	061-3534-90	16.92MHz
PWB	039-2846-20	PWB(WITHOUT COMPONENT)

LED PWB(B4) section

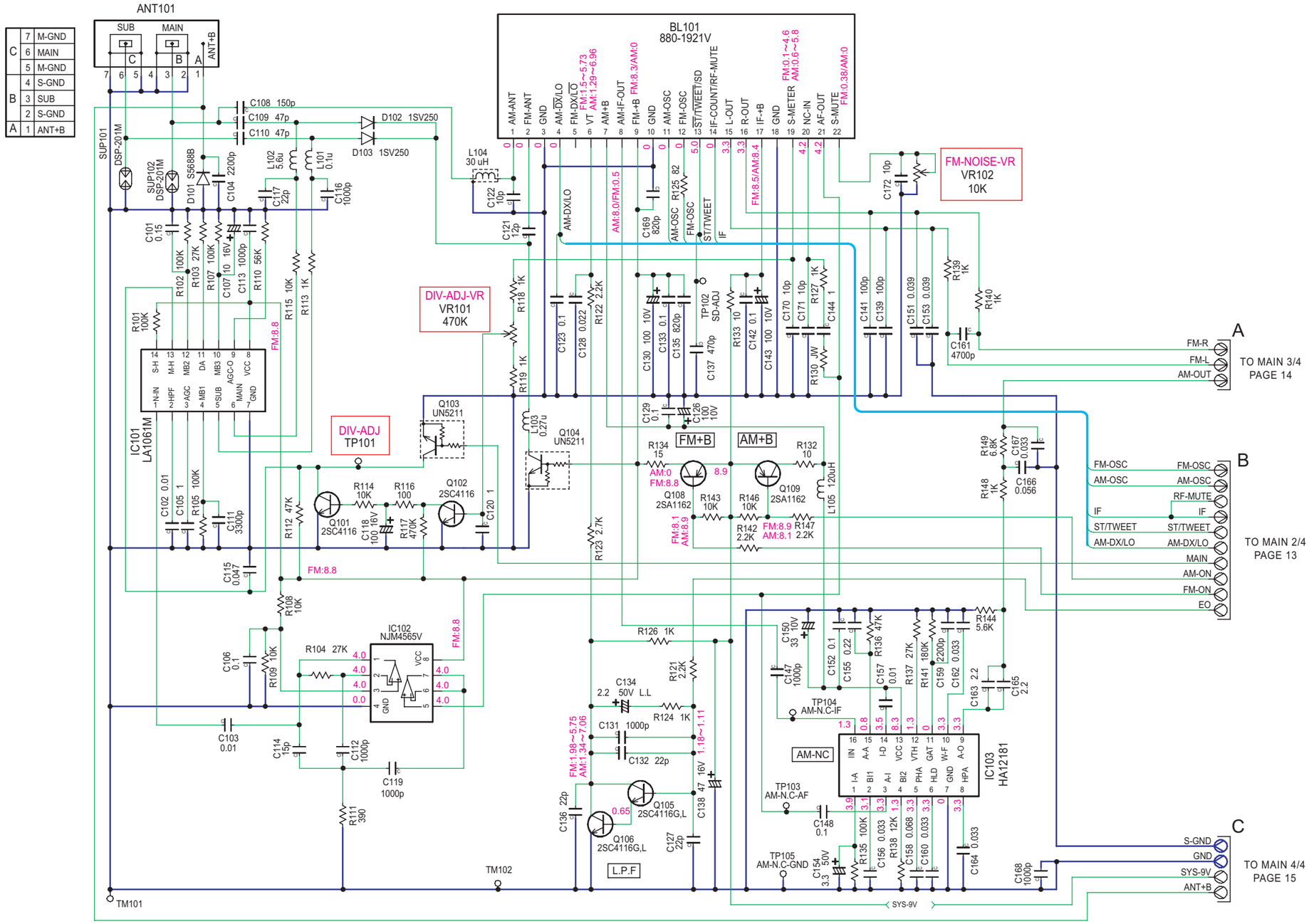
REF No.	PART No.	DESCRIPTION
D1	001-7058-90	AN1105W-RR
D2	001-7058-90	AN1105W-RR
J1	074-1138-60	10P

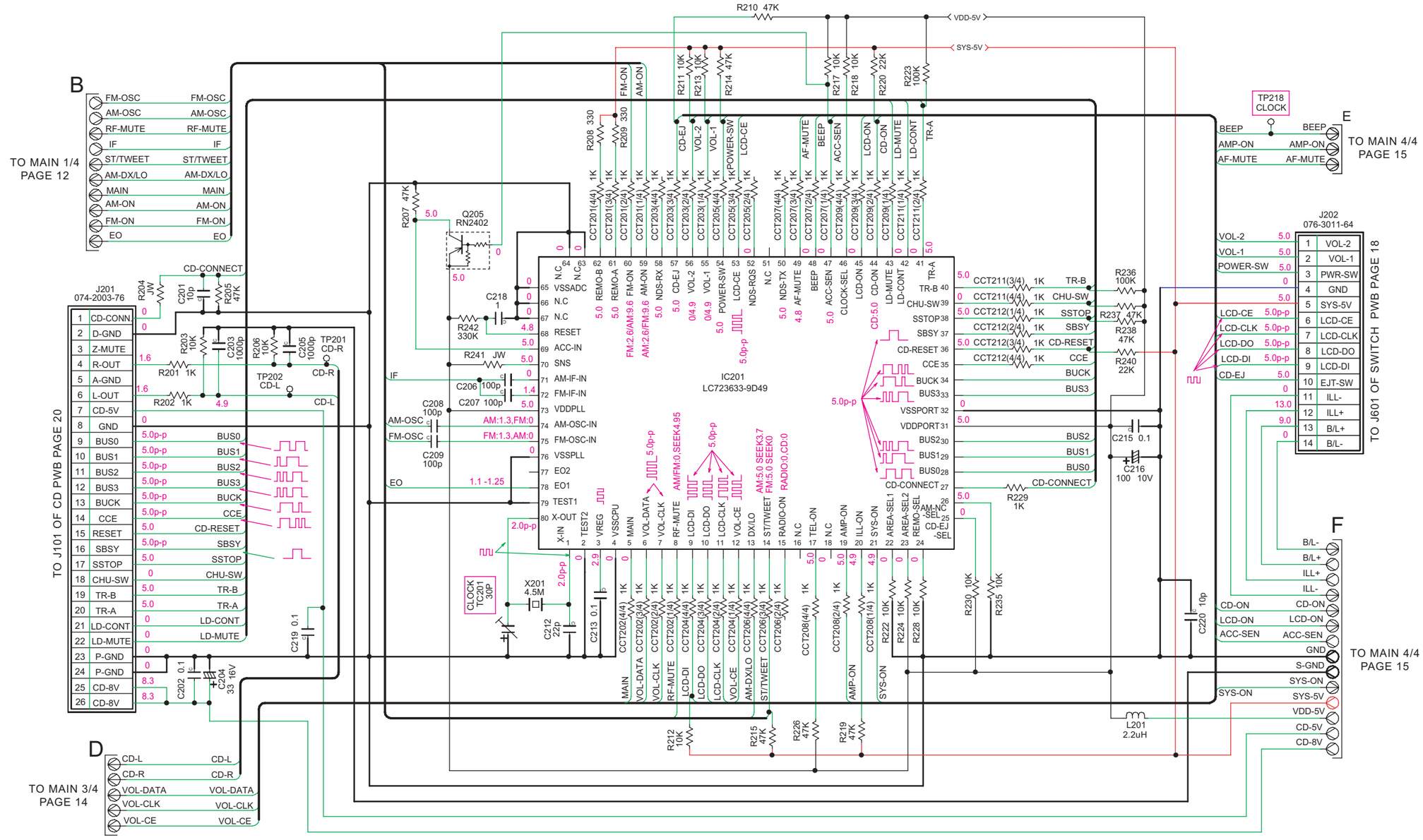
REF No.	PART No.	DESCRIPTION
Q1	060-4015-91	PS1192HB-33-TR
Q2	060-4015-91	PS1192HB-33-TR
S1	013-7414-50	CHUCKING

REF No.	PART No.	DESCRIPTION
S2	013-7413-50	LIMIT
PWB	039-1944-21	PWB(WITHOUT COMPONENT)

CIRCUIT DIAGRAM

Main PWB 1/4 (B1) section




TO MAIN 1/4 PAGE 12
TO MAIN 4/4 PAGE 15
TO MAIN 3/4 PAGE 14
TO MAIN 4/4 PAGE 15
TO J101 OF CD PWB PAGE 20
TO J601 OF SWITCH PWB PAGE 18
R210 47K
VDD-5V
SYS-5V
IC201
LC723633-9D49
J201 074-2003-76
J202 076-3011-64
TP218 CLOCK
CD-CONNECT
TP201 CD-R
TP202 CD-L
X201 4.5M
CLOCK TC201 30P
L201 2.2uH
C215 0.1
C216 100 10V
C220 10p
R229 1K
R230 10K
R235 10K
R236 100K
R237 47K
R238 47K
R240 22K
R241 JW
R242 330K
C218 1
C206 100p
C207 100p
C208 100p
C209 100p
R212 10K
R215 47K
R219 47K
R226 47K
Q205 RN2402
R207 47K
R208 330
R209 330
R211 10K
R213 10K
R214 47K
R217 10K
R218 10K
R220 22K
R223 100K
R222 10K
R224 10K
R228 10K
C201 10p
R204 JW
R205 47K
R203 10K
R206 10K
C203 1000p
C205 1000p
R201 1K
R202 1K
C202 0.1
C204 33 16V
C212 22p
C213 0.1
C219 0.1
FM-OSC
AM-OSC
RF-MUTE
IF
ST/TWEET
AM-DX/LO
MAIN
AM-ON
FM-ON
EO
CD-L
CD-R
VOL-DATA
VOL-CLK
VOL-CE
BEEP
AMP-ON
AF-MUTE
VOL-2
VOL-1
POWER-SW
LCD-CE
CD-CLK
LCD-DO
LCD-DI
EJT-SW
ILL-
ILL+
B/L+
B/L-
CD-ON
LCD-ON
ACC-SEN
GND
S-GND
SYS-ON
SYS-5V
VDD-5V
CD-5V
CD-8V
BUS0
BUS1
BUS2
BUS3
BUCK
CCE
CD-RESET
SBSY
SSTOP
CHU-SW
TR-B
TR-A
LD-CONT
LD-MUTE
P-GND
CD-CONN
D-GND
Z-MUTE
R-OUT
A-GND
L-OUT
CD-5V
GND
RESET
ACC-IN
SNS
AM-IF-IN
FM-IF-IN
VDDPLL
AM-OSC-IN
FM-OSC-IN
VSSPLL
EO2
EO1
TEST1
X-OUT
X-IN
TEST2
VREG
VSSCPU
MAIN
VOL-DATA
VOL-CLK
RF-MUTE
LCD-DI
LCD-DO
LCD-CLK
VOL-CE
DX/LO
ST/TWEET
RADIO-ON
N.C
TEL-ON
AMP-ON
ILL-ON
SYS-ON
AREA-SEL1
AREA-SEL2
REMO-SEL
AM-NC -SEL
CD-EJ -SEL
REMO-B
REMO-A
NDS-RX
CD-EJ
VOL-2
VOL-1
POWER-SW
LCD-CE
NDS-RQS
NDS-TX
AF-MUTE
BEEP
ACC-SEN
CLOCK-SEL
LCD-ON
CD-ON
LD-MUTE
LD-CONT
TR-A
CCT201(4/4)
CCT201(3/4)
CCT201(2/4)
CCT201(1/4)
CCT203(4/4)
CCT203(3/4)
CCT203(2/4)
CCT203(1/4)
CCT205(4/4)
CCT205(3/4)
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CCT207(4/4)
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CCT202(4/4)
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CCT204(4/4)
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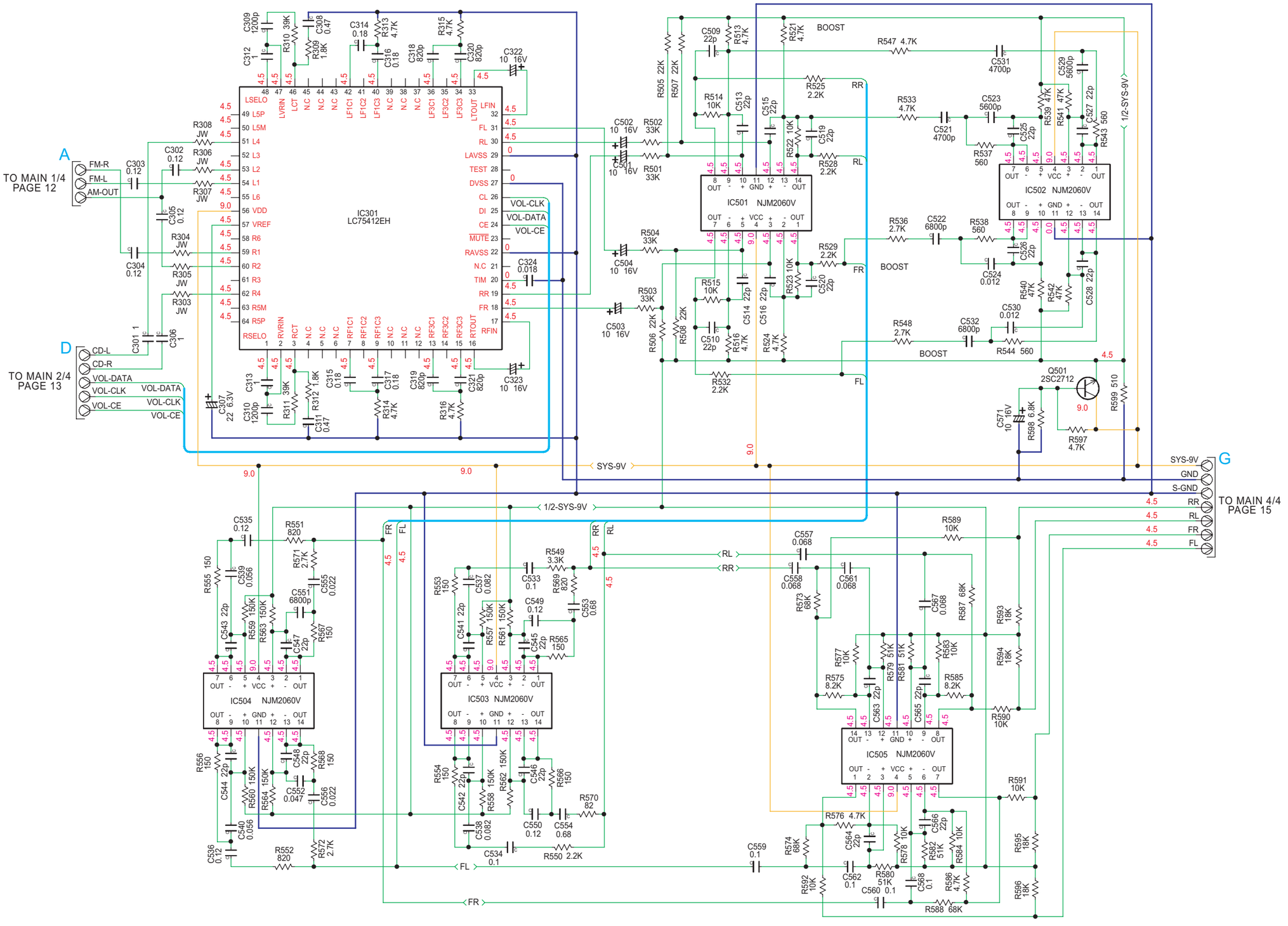
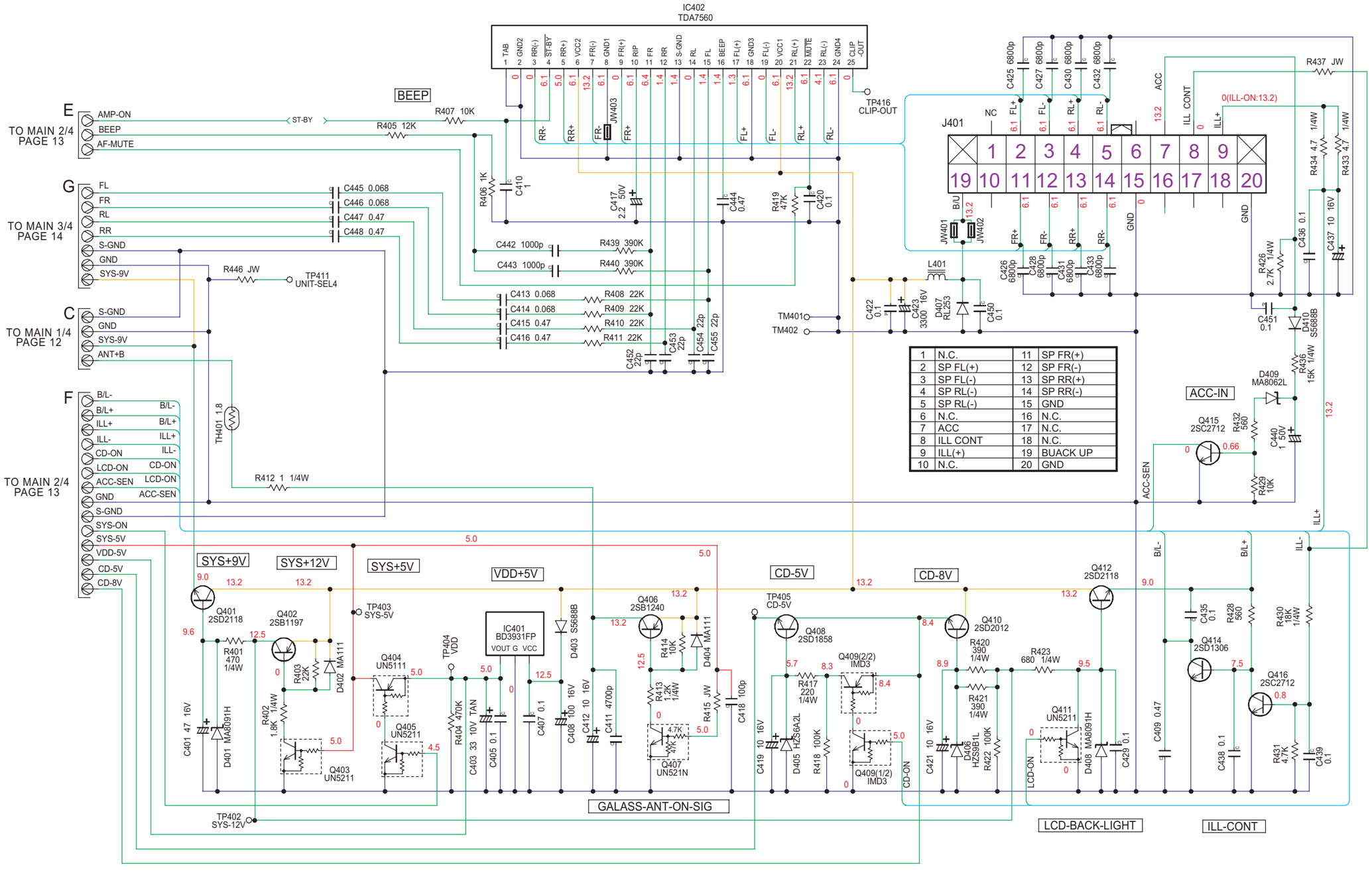
CCT204(1/4)
CCT206(4/4)
CCT206(3/4)
CCT206(2/4)
CCT208(4/4)
CCT208(2/4)
CCT208(1/4)
AM:1.3,FM:0
FM:1.3,AM:0
AM:5.0 SEEK3.7
FM:5.0 SEEK0
RADIO:0,CD:0
AM/FM:0,SEEK4.95
1K
10K
22K
47K
100K
330
100p
0.1
10p
1000p
33 16V
22p
4.5M
30P
10K
2.2uH

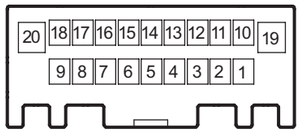

A
TO MAIN 1/4
PAGE 12
FM-R
FM-L
AM-OUT
D
TO MAIN 2/4
PAGE 13
CD-L
CD-R
VOL-DATA
VOL-CLK
VOL-CE
IC301
LC75412EH
LSELO
L5P
L5M
L4
L3
L2
L1
L6
VDD
VREF
R6
R1
R2
R3
R4
R5M
R5P
RSELO
LVRIN
LCT
LFIN
FL
RL
LAVSS
TEST
DVSS
CL
DI
CE
MUTE
RAVSS
TIM
RR
FR
RFIN
RVRIN
RCT
RTOUT
IC501 NJM2060V
IC502 NJM2060V
IC503 NJM2060V
IC504 NJM2060V
IC505 NJM2060V
BOOST
SYS-9V
1/2-SYS-9V
Q501
2SC2712
G
TO MAIN 4/4
PAGE 15
SYS-9V
GND
S-GND
RR
RL
FR
FL


IC402
TDA7560
TAB GND2 RR(-) ST-BY RR+ VCC2 FR(-) GND1 FR(+) RIP FR RR S-GND RL FL BEEP FL(+) GND3 FL(-) VCC1 RL(+) MUTE RL(-) GND4 CLIP -OUT
BEEP
TP416 CLIP-OUT
E
TO MAIN 2/4 PAGE 13
AMP-ON
BEEP
AF-MUTE
ST-BY
R407 10K
R405 12K
R406 1K
C410 1
C417 2.2 50V
C444 0.47
R419 47K
C420 0.1
G
TO MAIN 3/4 PAGE 14
FL
FR
RL
RR
S-GND
GND
SYS-9V
C445 0.068
C446 0.068
C447 0.47
C448 0.47
C442 1000p
C443 1000p
R439 390K
R440 390K
C413 0.068
C414 0.068
C415 0.47
C416 0.47
R408 22K
R409 22K
R410 22K
R411 22K
C452 22p
C453 22p
C454 22p
C455 22p
R446 JW
TP411 UNIT-SEL4
C
TO MAIN 1/4 PAGE 12
S-GND
GND
SYS-9V
ANT+B
F
TO MAIN 2/4 PAGE 13
B/L-
B/L+
ILL+
ILL-
CD-ON
LCD-ON
ACC-SEN
GND
S-GND
SYS-ON
SYS-5V
VDD-5V
CD-5V
CD-8V
TH401 1.8
R412 1 1/4W
TM401
TM402
L401
C422 0.1
C423 3300 16V
D407 RLZ5.1
C450 0.1
J401
NC
1 2 3 4 5 6 7 8 9
19 10 11 12 13 14 15 16 17 18 20
C425 6800p
C427 6800p
C430 6800p
C432 6800p
FL+ FL- RL+ RL-
ACC
ILL CONT
ILL+
0(ILL-ON:13.2)
R437 JW
B/U
JW401
JW402
FR+ FR- RR+ RR-
GND
C426 6800p
C428 6800p
C431 6800p
C433 6800p
R434 4.7 1/4W
R433 4.7 1/4W
C436 0.1
C437 10 16V
R426 2.7K 1/4W
C451 0.1
D410 S5688B
D409 MA8062L
R436 15K 1/4W
C440 1 50V
Q415 2SC2712
R432 560
R429 10K
ACC-IN
ACC-SEN
ILL+
SYS+9V
SYS+12V
SYS+5V
VDD+5V
CD-5V
CD-8V
Q401 2SD2118
Q402 2SB1197
TP403 SYS-5V
Q404 UN5111
Q405 UN5211
Q403 UN5211
TP404 VDD
IC401 BD3931FP VOUT G VCC
D403 S5688B
Q406 2SB1240
D404 MA111
R414 10K
R413 1.2K 1/4W
R415 JW
C418 100p
TP405 CD-5V
Q408 2SD1858
Q409(2/2) IMD3
Q409(1/2) IMD3
Q410 2SD2012
Q412 2SD2118
R401 470 1/4W
R403 22K
R402 1.8K 1/4W
D402 MA111
C401 47 16V
D401 MA8091H
C403 33 10V TAN
C404 470K
C405 0.1
C407 0.1
C408 100 16V
C412 10 16V
C411 4700p
R417 220 1/4W
R418 100K
C419 10 16V
D405 HZ5A2L
C421 10 16V
D406 HZ5B1L
R420 390 1/4W
R421 390 1/4W
R422 100K
R423 680 1/4W
Q411 UN5211
D408 MA8091H
C429 0.1
C409 0.47
C435 0.1
R428 560
Q414 2SD1306
C438 0.1
Q416 2SC2712
R430 18K 1/4W
R431 4.7K
C439 0.1
GALASS-ANT-ON-SIG
LCD-BACK-LIGHT
ILL-CONT
TP402 SYS-12V
1 N.C. 11 SP FR(+)
2 SP FL(+) 12 SP FR(-)
3 SP FL(-) 13 SP RR(+)
4 SP RL(+) 14 SP RR(-)
5 SP RL(-) 15 GND
6 N.C. 16 N.C.
7 ACC 17 N.C.
8 ILL CONT 18 N.C.
9 ILL(+) 19 BUACK UP
10 N.C. 20 GND

PRINTED WIRING BOARD

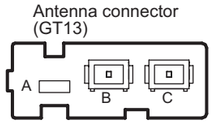
Main PWB (B1) section

Main connector (TH18)

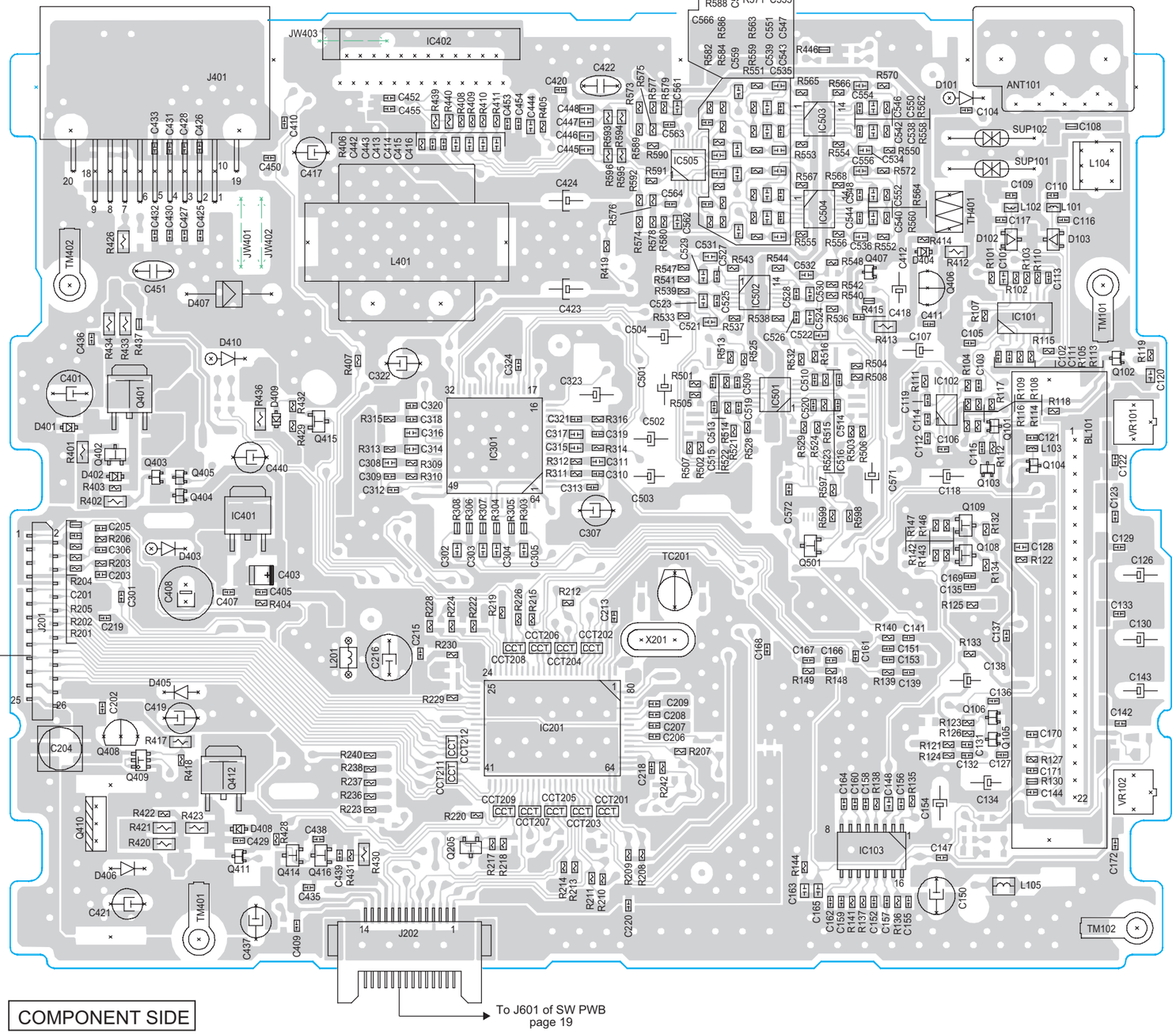


1	N.C.	11	SP FR(+)
2	SP FL(+)	12	SP FR(-)
3	SP FL(-)	13	SP RR(+)
4	SP RL(-)	14	SP RR(-)
5	SP RL(-)	15	GND
6	N.C.	16	N.C.
7	ACC	17	N.C.
8	ILL CONT	18	N.C.
9	ILL(+)	19	BUACK UP
10	N.C.	20	GND

Antenna connector (GT13)



A	ANT+B
B	ANT IN(MAIN)
C	ANT IN(SUB)



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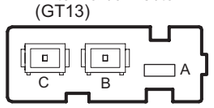
FLAT WIRE 816-4022-50

To J601 of SW PWB page 19

COMPONENT SIDE

Main PWB(B1) section

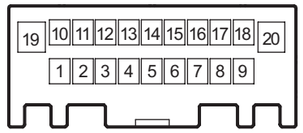
Antenna connector (GT13)

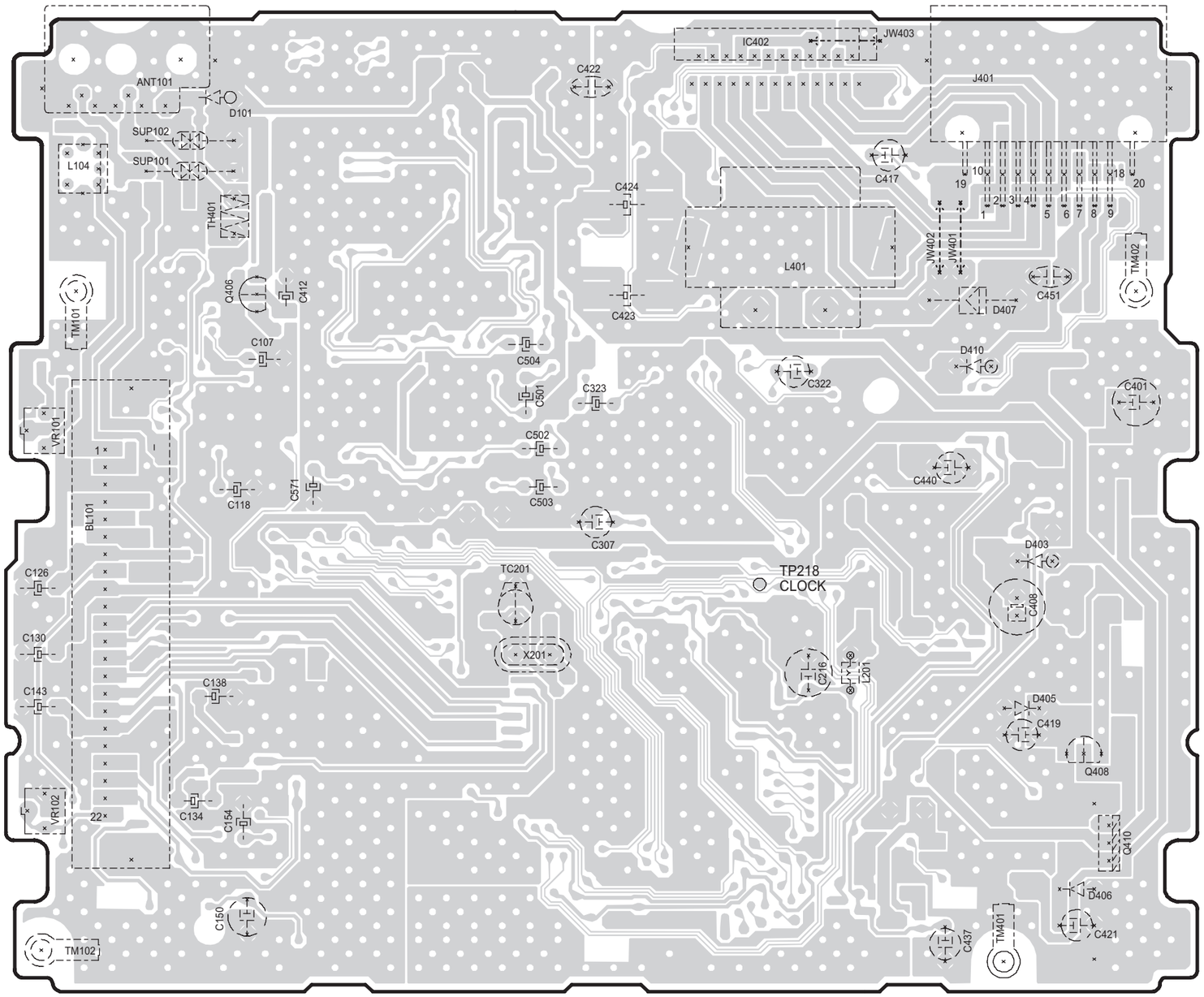


A	ANT+B
B	ANT IN(MAIN)
C	ANT IN(SUB)

1	N.C.	11	SP FR(+)
2	SP FL(+)	12	SP FR(-)
3	SP FL(-)	13	SP RR(+)
4	SP RL(-)	14	SP RR(-)
5	SP RL(-)	15	GND
6	N.C.	16	N.C.
7	ACC	17	N.C.
8	ILL CONT	18	N.C.
9	ILL(+)	19	BUACK UP
10	N.C.	20	GND

Main connector (TH18)





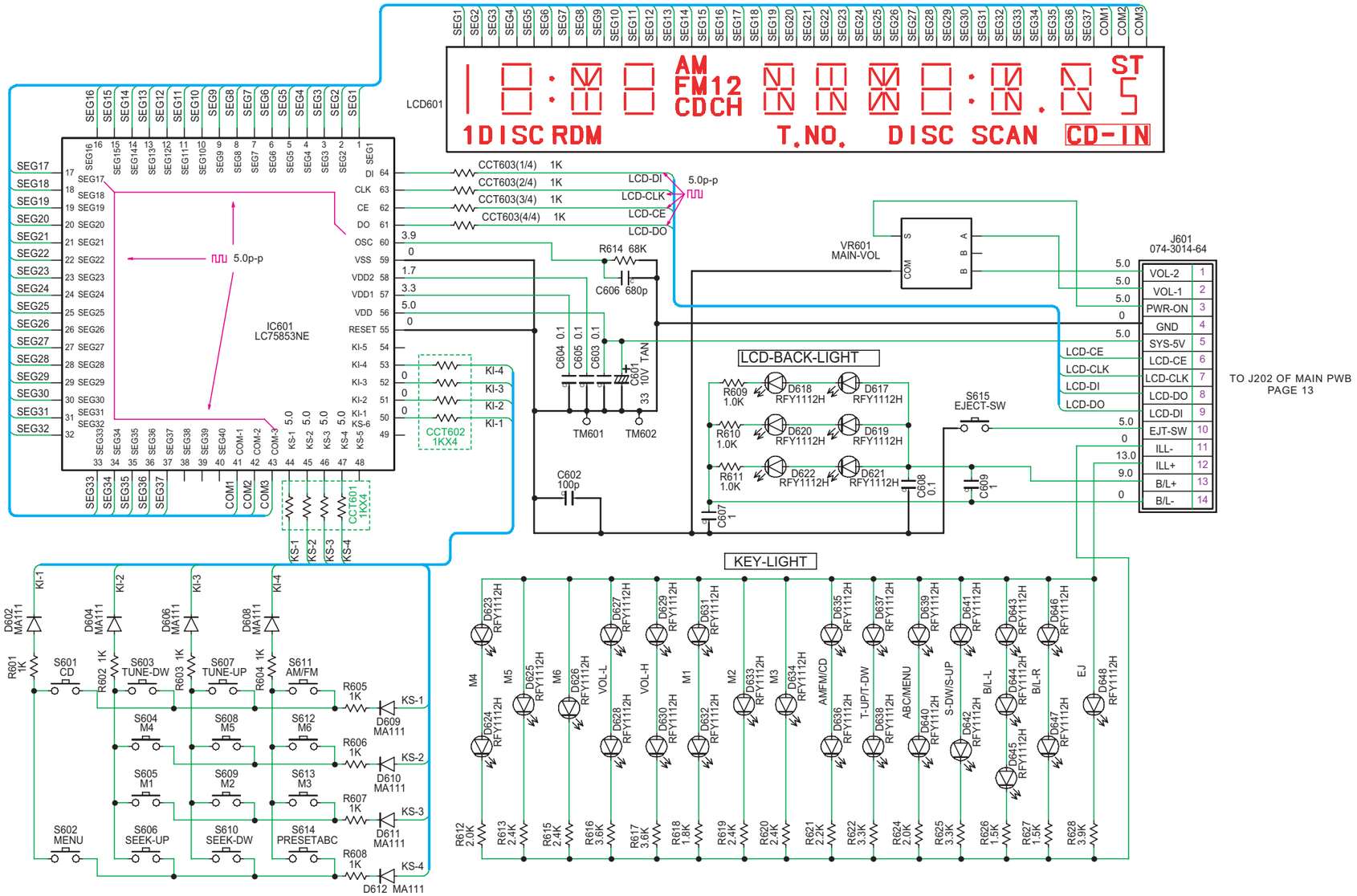
TP218

SOLDER SIDE

The parts of a dashed line express the parts on a component side.

CIRCUIT DIAGRAM

Switch PWB (B2) section

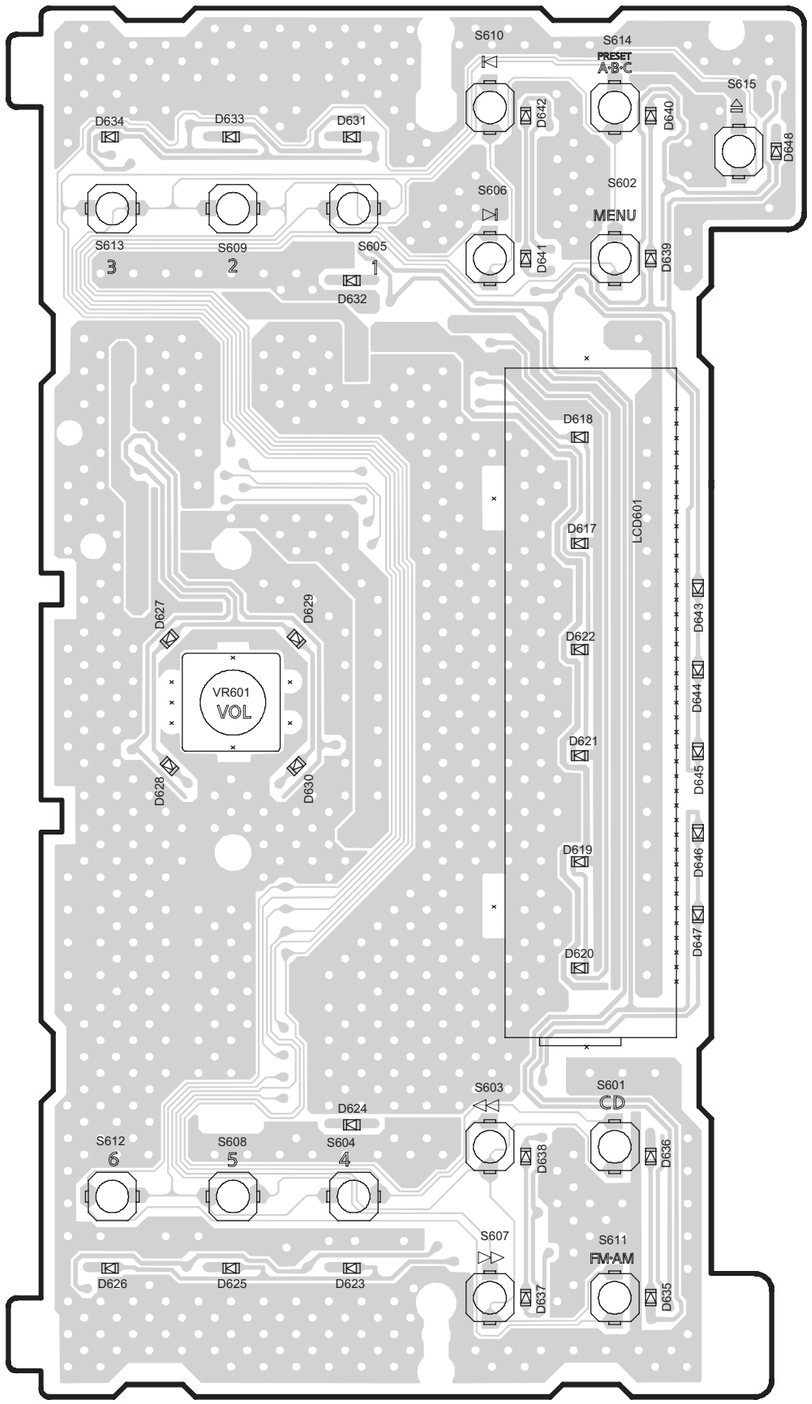


PRINTED WIRING BOARD

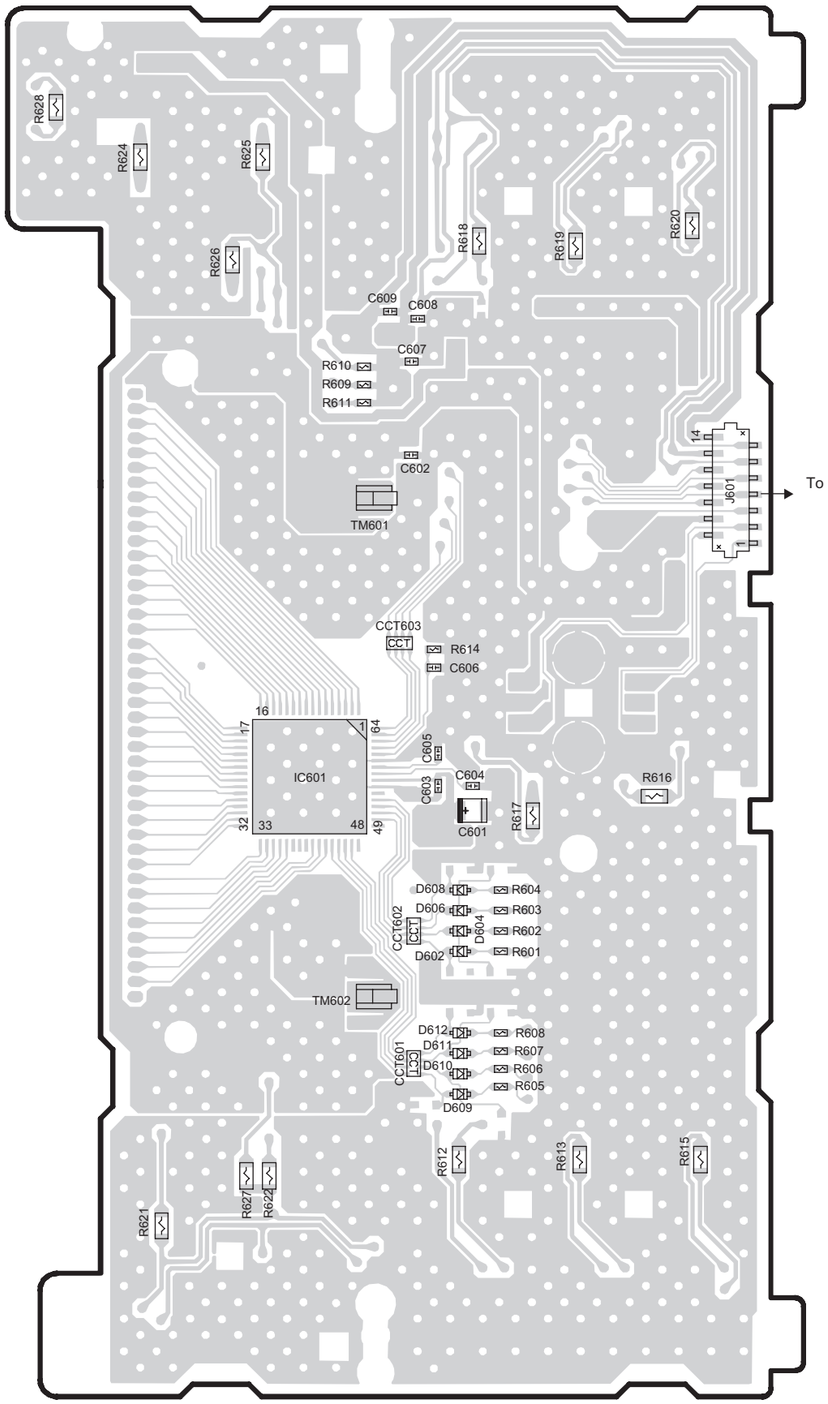
Switch PWB(B2) section

Caution:
COMPONENT SIDE: Parts on the component side seen from the component side are indicated.
SOLDER SIDE: Parts on the solder side seen from the solder side are indicated.

COMPONENT SIDE

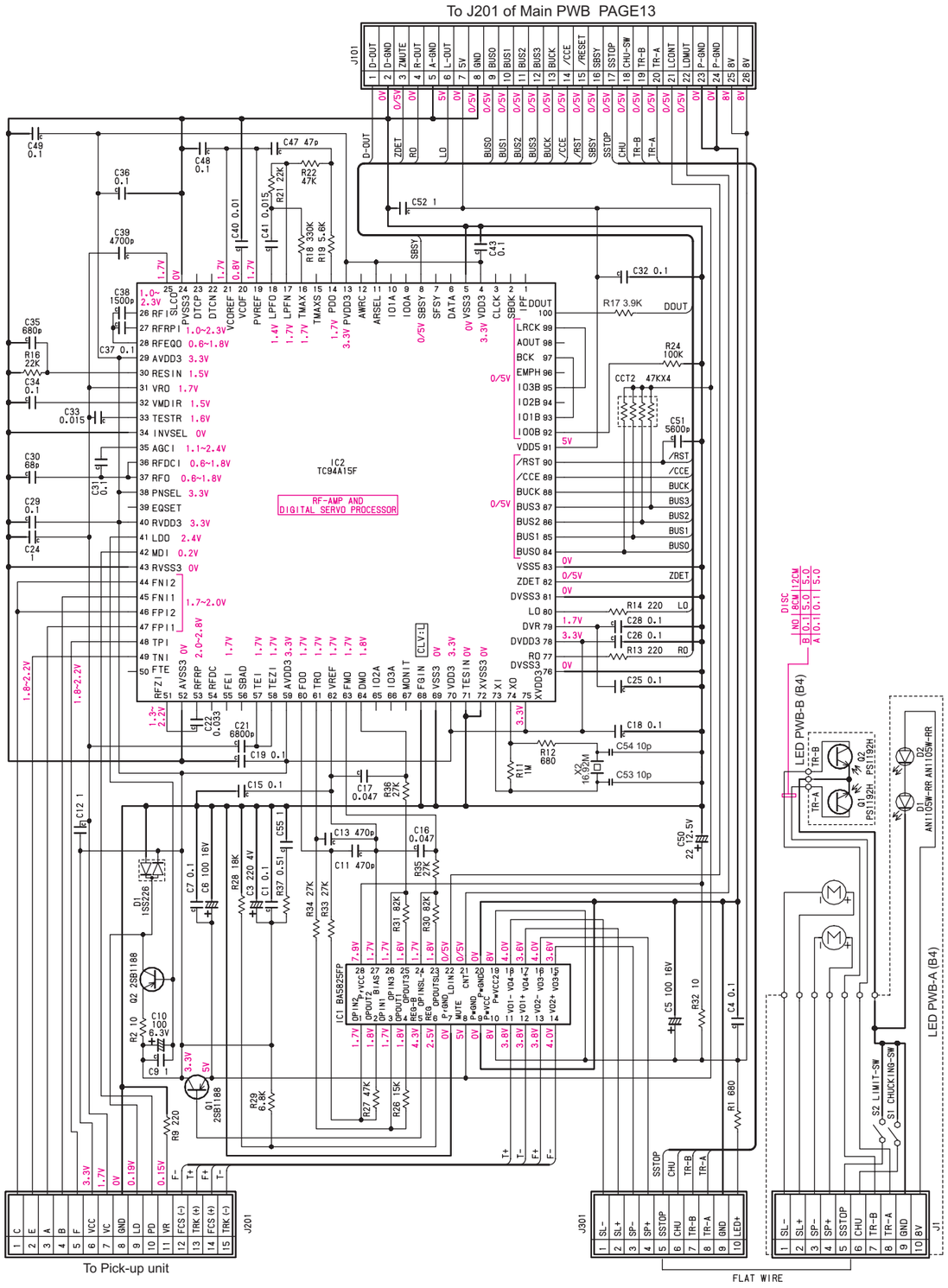


SOLDER SIDE



CIRCUIT DIAGRAM

CD PWB (B3) / LED PWB (B4) section



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CD PWB (B3) / LED PWB (B4) section